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(FILE 'HOME' ENTERED AT 09:19:30 ON 06 JUN 2005)

FILE 'HCAPLUS' ENTERED AT 09:19:43 ON 06 JUN 2005 1 US20020065296/PN OR US99-115878/AP, PRN L1

FILE 'REGISTRY' ENTERED AT 09:20:28 ON 06 JUN 2005

FILE 'HCAPLUS' ENTERED AT 09:20:29 ON 06 JUN 2005 TRA L1 1- RN : 157 TERMS L_2

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FILE 'WPIX' ENTERED AT 09:20:35 ON 06 JUN 2005 T.4 1 US20020065296/PN OR US99-115878/AP, PRN

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FILE COVERS 1907 - 6 Jun 2005 VOL 142 ISS 24 FILE LAST UPDATED: 5 Jun 2005 (20050605/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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- ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN L1
- AN2002:409267 HCAPLUS
- DN 137:6098
- Entered STN: 31 May 2002 ED
- TI Heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
- Dumas, Jacques; Riedl, Bernd; Khire, Uday; Sibley, Robert N.; IN Hatoum-Mokdad, Holia; Monahan, Mary-katherine; Gunn, David E.; Lowinger, Timotthy B.; Scott, William J.; Smith, Roger A.; Wood, Jill E.
- PA Bayer Corporation, USA
- U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. Ser. No. 778,039. SO CODEN: USXXCO
- DT Patent
- LА English
- IC

ICM A61K031-506 ICS A61K031-501; A61K031-497; A61K031-4725; A61K031-4709

INCL 514310000

27-17 (Heterocyclic Compounds (One Hetero Atom)) Section cross-reference(s): 1

FAN.CNT 5

PATENT NO. KIND DATE APPLICATION NO. DATE ----

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US 2001-838286
                                                                            20010420 <--
PΙ
     US 2002065296
                            A1
                                    20020530
                                                 US 2002-71248
     US 2003139605
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                                    20030724
                                                                           20020211
                                                 CA 2002-2443952
                            AA
                                    20021031
                                                                           20020417
     CA 2443952
     WO 2002085859
                            A1
                                    20021031
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              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
              PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
              US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                    20040114 EP 2002-725709
     EP 1379507
                             A1
                                                                          20020417
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                 JP 2002-583386
                                                                          20020417
     JP 2004537511
                             T2
                                    20041216
                                    19990113
PRAI US 1999-115878P
                            P
     US 1999-257265
                            B1
                                    19990225
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                                    20010207
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                                    19990113
     US 1999-257266
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                                    19990225
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                                    19991022
     US 1999-425228
     US 2001-838286
                             Α
                                    20010420
     US 2001-948915
                             A1
                                    20010910
     WO 2002-US12064
                             W
                                    2,0020417
CLASS
 PATENT NO.
                   CLASS PATENT FAMILY CLASSIFICATION CODES
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 US 2002065296
                   ICM
                          A61K031-506
                          A61K031-501; A61K031-497; A61K031-4725; A61K031-4709
                   ICS
                   TNCL
                           514310000
 US 2002065296
                  NCL
                           514/310.000; 514/313.000; 514/336.000; 514/337.000;
                           514/252.030; 514/252.040; 514/255.050; 514/256.000
                           A61K031/17; A61K031/18; A61K031/24; A61K031/341;
                   ECLA
                           A61K031/40+A; A61K031/4035; A61K031/44; A61K031/44+A;
                           A61K031/4439; A61K031/4453; A61K031/47; A61K031/4709;
                           A61K031/4725; A61K031/495+A; A61K031/496; A61K031/5375;
                           A61K031/5377; C07D213/75D3; C07D215/38C; C07D217/22;
                           C07D401/12+215+213
 US 2003139605
                   NCL
                           546/291.000
                           A61K031/17; C07C311/29; C07C317/22; C07D209/48D5C1;
                   ECLA
                           C07D213/75D3; C07D213/81E; C07D295/12A1;
                           C07D295/12B1D4; C07D295/18B2D; A61K031/18; A61K031/24;
                           A61K031/341; A61K031/40+A; A61K031/4035; A61K031/44+A;
                           A61K031/4439; A61K031/4453; A61K031/495+A; A61K031/496; A61K031/5375; A61K031/5377; C07C275/28; C07C275/30;
                           C07C275/32; C07C275/36; C07C275/40
                           A61K031/44; A61K031/47; A61K031/4709; A61K031/4725;
 WO 2002085859
                   ECLA
                           C07D213/75D3; C07D215/38C; C07D217/22;
                           C07D401/12+215+213; C07D401/12+217+213
 JP 2004537511
                   FTERM 4C031/JA09; 4C034/AL05; 4C055/AA01; 4C055/BA01;
                           4C055/BA02; 4C055/BA53; 4C055/BB17; 4C055/CA01;
                           4C055/DA06; 4C055/DA28; 4C055/DA42; 4C055/DA47;
                           4C055/DB10; 4C055/DB17; 4C055/EA01; 4C063/AA01;
                           4C063/BB07; 4C063/BB09; 4C063/CC14; 4C063/CC15;
                           4C063/DD07; 4C063/DD12; 4C063/EE01; 4C086/AA01; 4C086/AA03; 4C086/BC17; 4C086/BC28; 4C086/BC30;
                           4C086/BC50; 4C086/GA07; 4C086/GA08; 4C086/GA12;
                           4C086/MA01; 4C086/MA04; 4C086/NA14; 4C086/ZA01;
                           4C086/ZA02; 4C086/ZA36; 4C086/ZA45; 4C086/ZA54;
                           4C086/ZA59; 4C086/ZA67; 4C086/ZA68; 4C086/ZA75;
                           4C086/ZA86; 4C086/ZA89; 4C086/ZA94; 4C086/ZA96; 4C086/ZA97; 4C086/ZB02; 4C086/ZB05; 4C086/ZB11;
                           4C086/ZB13; 4C086/ZB15; 4C086/ZB26; 4C086/ZB33; ...
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4C086/ZB35; 4C086/ZC21; 4C086/ZC35

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OS
     MARPAT 137:6098
AB
     This invention relates to the use of a group of heteroaryl ureas (I; for
     example, N-(2-methoxy-3-quinoly1)-N'-[4-[3-(N-
     methylcarbamoyl)phenoxy]phenyl]urea) containing N in treating p38 mediated
     diseases, and pharmaceutical compns. for use in such therapy. I is
     A-NHC(O)NH-B or a pharmaceutically acceptable salt thereof, wherein A is a
     substituted or unsubstituted pyridyl, quinolinyl or isoquinolinyl group, B
     is a substituted or unsubstituted, up to tricyclic aryl or heteroaryl
     moiety of up to 50 C atoms with a cyclic structure bound directly to N,
     containing at least 5 cyclic members with 0-4 members of groups consisting of
     N, O and S. Information about the substituents for A and B are given in the claims. Although the methods of preparation are not claimed, 37 example
     prepns. are included as well as examples of preparation of intermediates. No
     pharmacol. data is included.
     nitrogen heteroaryl urea prepn p38 kinase inhibitor; pyridyl urea prepn
ST
     p38 kinase inhibitor; quinolyl urea prepn p38 kinase inhibitor;
     isoquinolyl urea prepn p38 kinase inhibitor
TΤ
     Infection
        (Chaqas' disease; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Inflammation
        (Crohn's disease; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Intestine, disease
        (Crohn's; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
     Disease, animal
TΤ
        (Jarisch-Herxheimer reaction; preparation of heteroaryl ureas containing
        nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)
ΤT
     Malaria
        (Plasmodium falciparum malaria and cerebral malaria; preparation of
        heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
        for treating)
ΙT
     Antimalarials
        (Plasmodium falciparum malaria and cerebral malaria; preparation of
        heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
        for use as)
TΤ
     Toxins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Shiga-like toxin, effects of toxins from Escherichia coli infection;
        preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors for treatment of)
     Respiratory distress syndrome
IT
        (adult; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
IT
     Hepatitis
        (alc.; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
ΙT
     Transplant rejection
        (allotransplant; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
ΙT
        (alveolus, injury; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Antiarteriosclerotics
        (antiatherosclerotics; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for use as)
IT
     Aneurysm
        (aortic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
IT
     Meningitis
        (bacterial; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
     Necrosis
IT
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(bowel; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38

kinase inhibitors for treatment of) Bronchi, disease TΤ Inflammation (bronchitis, obliterative; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) TT Injury (cerebral; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Pneumoconiosis (coal worker's; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Eye, disease (cornea, ulcer; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT (corneal; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Radiation (damage, injury/toxicity following administration of monoclonal antibodies; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) Cartilage, disease IT (degeneration; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Multiple sclerosis (demyelation and oligiodendrocyte loss in; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Liver, disease (during acute inflammation; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) TT RL: BSU (Biological study, unclassified); BIOL (Biological study) (enterotoxin A, effects of toxins from Staphylococcus infection; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Skin, disease (epidermolysis bullosa, dystrophobic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) Liver, disease ΙŢ (failure; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) Lung, disease IT (fibrosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Nervous system agents (for demyelating disease; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) TT Wound healing (impaired wound healing in infection; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) TT Helicobacter pylori (infection during peptic ulcer disease; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Borrelia burgdorferi Cytomegalovirus Human immunodeficiency virus Influenza virus Theiler's murine encephalomyelitis virus Treponema pallidum (infections from; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Brain, disease Reperfusion (injury; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) ΙT Leukemia

(lymphocytic, inhibitors; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) IT (metastasis, inhibitors; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) IT Heterocyclic compounds RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (nitrogen, heteroaryl ureas; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors) IT Bone, disease (osteopenia, mediated by MMP activity; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Inflammation Pancreas, disease (pancreatitis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) ΤТ Ulcer (peptic, Helicobacter pylori infection during; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) ΙT Osteoporosis (postmenopausal; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treating) ΙT (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors) IT Allergy Alzheimer's disease Arthritis Asthma Diabetes mellitus Rheumatoid arthritis Tuberculosis (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treating) IT Encephalitis Myelodysplastic syndromes Periodontium, disease Psoriasis Rheumatic fever Silicosis (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) Allergy inhibitors Anti-Alzheimer's agents Anti-infective agents Anti-inflammatory agents Antiarthritics Antiasthmatics Antibacterial agents Anticoaqulants Antidiabetic agents Antirheumatic agents Antitumor agents Cardiovascular agents Contraceptives Tuberculostatics (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) TT Biliary tract, disease (primary biliary cirrhosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study)

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(proteinuria; preparation of heteroaryl ureas containing nitrogen hetero-atoms
        as p38 kinase inhibitors for treatment of)
TТ
     Fibrosis
     Sarcoidosis
        (pulmonary; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
TT
        (reperfusion; preparation of heteroaryl ureas containing nitrogen hetero-atoms
        as p38 kinase inhibitors for treatment of)
IT
        (resorption; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
IT
     Lung, disease
        (sarcoidosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms
        as p38 kinase inhibitors for treatment of)
IΤ
     Shock (circulatory collapse)
        (septic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
IT
     Inflammation
        (systemic inflammatory response syndrome; preparation of heteroaryl ureas
        containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Lupus erythematosus
        (systemic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
IT
    Disease, animal
        (temporomandibular joint; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
TT
     Joint, anatomical
        (temporomandibular, disease; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
    Osteoporosis
        (therapeutic agents, postmenopausal; preparation of heteroaryl ureas containing
        nitrogen hetero-atoms as p38 kinase inhibitors for use as)
IT
    Shock (circulatory collapse)
        (toxic shock syndrome; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
TT
    Digestive tract, disease
        (ulcer, peptic, Helicobacter pylori infection during; preparation of
        heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
        for treatment of)
     Inflammation
IT
     Intestine, disease
        (ulcerative colitis; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     165245-96-5, p38 Kinase
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; preparation of heteroaryl ureas containing nitrogen hetero-atoms
        as)
IT
    673-09-6P, 4-(4-Pyridylthio)aniline 6337-24-2P, 1-Methoxy-4-(4-
    nitrophenoxy)benzene 13472-85-0P, 5-Bromo-2-methoxypyridine
     18994-90-6P, 4-(1-Imidazolylmethyl)-1-nitrobenzene 27237-21-4P,
     4-(3-Carboxyphenoxy)-1-nitrobenzene
                              trobenzene 27692-74-6P, 4-(4-
28232-34-0P, 5-Nitro-2-(4-methylphenoxy)pyridine
     Pyridinylmethyl)aniline
    28232-52-2P, 3-(3-Pyridinyloxy)-1-nitrobenzene 29264-35-5P,
     4-(3-Carboxy-4-hydroxyphenoxy)-1-nitrobenzene
                                                     31465-36-8P,
     4-(4-Methoxyphenoxy)aniline 32361-76-5P, 3-(4-Nitrobenzyl)pyridine
     36089-89-1P, 4-(4-Methylsulfonylphenoxy)-1-nitrobenzene
                                                               50727-06-5P.
     5-Hydroxyisoindoline-1,3-dione 51727-15-2P, 4-Chloropyridine-2-carbonyl
     chloride hydrochloride 51834-97-0P, 5-Hydroxy-2-methoxypyridine
    56643-85-7P, 4-(1-Imidazolylmethyl)aniline 62248-47-9P,
     4-[(4-Butoxyphenyl)thio]-1-nitrobenzene
                                              62248-51-5P,
     4-(4-Butoxyphenyl)thioaniline 64064-63-7P, 4-(6-Methyl-3-pyridinyloxy)-1-
    nitrobenzene
                    70991-08-1P, 4-(2-Pyridinylthio)aniline 71708-64-0P,
     4-[3-(N-Methylcarbamoyl)phenoxy]-1-nitrobenzene 85666-15-5P,
     4-[(3-Pyridinyl)methyl]aniline 92575-23-0P, 3-(4-Pyridinylthio)aniline
     99586-65-9P, 4-Chloro-2-pyridinecarboxamide 102877-78-1P 116289-71-5P,
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3-(3-Pyridinyloxy)aniline
                          135680-03-4P, 4-(4-tert-
Butoxycarbonylaminobenzyl)aniline 176977-85-8P, Methyl
4-chloropyridine-2-carboxylate hydrochloride 178809-75-1P,
4-[Hydroxy(4-pyridyl)methyl]-1-nitrobenzene 220000-87-3P
                                                             228401-26-1P,
3-(Trifluoromethyl)-4-(4-pyridinylthio)nitrobenzene 228401-27-2P,
3-(Trifluoromethyl)-4-(4-pyridinylthio)aniline
                                                228401-28-3P,
4-[(4-Phenyl-2-thiazolyl)thio]-1-nitrobenzene
                                                228401-29-4P,
4-[(4-Phenyl-2-thiazolyl)thio]aniline 228401-31-8P, 4-(6-Methyl-3-
pyridinyloxy) aniline
                      228401-32-9P, 4-(3,4-Dimethoxyphenoxy)-1-
             228401-33-0P, 4-(3,4-Dimethoxyphenoxy)aniline
228401-34-1P, 3-(6-Methyl-3-pyridinyloxy)-1-nitrobenzene 228401-35-2P,
3-(6-Methyl-3-pyridinyloxy)aniline
                                    228401-36-3P, 5-Amino-2-(4-
methylphenoxy) pyridine Dihydrochloride 228401-37-4P,
4-(3-Thienylthio)-1-nitrobenzene 228401-38-5P, 4-(5-
Pyrimidinyloxy)aniline 228401-39-6P, 4-[(2-Methoxy-5-pyridyl)oxy]-1-
              228401-40-9P, 4-(2-Methyl-4-pyridinyloxy)aniline
228401-41-0P, Methyl (4-nitrophenyl) (4-pyridyl) amine
                                                      228401-43-2P
4-(3-Methoxycarbonyl-4-methoxyphenoxy)-1-nitrobenzene
                                                284462-37-9P,
4-(3-Carboxy-4-methoxyphenoxy)-1-nitrobenzene
4-[2-(N-Methylcarbamoyl)-4-pyridyloxy]aniline
                                                284462-38-0P,
5-(4-Nitrophenoxy) isoindoline-1,3-dione
                                          284462-39-1P,
5-(4-Aminophenoxy) isoindoline-1,3-dione
                                          284462-46-0P,
4-[3-(N-Methylcarbamoyl)-4-methoxyphenoxy]-1-nitrobenzene
                                                            284462-47-1P,
4-[3-(N-Methylcarbamoyl)-4-methoxyphenoxy]aniline 284462-55-1P,
4-(3-Ethoxycarbonylphenoxy)-1-nitrobenzene
                                             284462-56-2P,
4-(3-N-Methylcarbamoylphenoxy)aniline 284462-78-8P, 3-[2-(N-
                                      284462-79-9P, 3-(2-Carbamoyl-4-
Methylcarbamoyl)-4-pyridyloxy]aniline
pyridyloxy)aniline 284462-80-2P, 4-(2-Carbamoyl-4-pyridyloxy)aniline
                                                   432050-13-0P,
284462-84-6P, 4-(4-Methylsulfonylphenoxy)aniline
                          432050-14-1P, 4-[(2-Methoxy-5-
4-(3-Thienylthio)aniline
pyridyl)oxy]aniline
                      432050-15-2P, Methyl (4-aminophenyl) (4-pyridyl) amine
432050-16-3P, 4-[Hydroxy(4-pyridyl)methyl]aniline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of heteroaryl ureas containing nitrogen hetero-atoms
   as p38 kinase inhibitors)
284461-54-7P, N-[2-Methoxy-5-(trifluoromethyl)phenyl]-N'-[4-(1,3-
dioxoisoindolin-5-yloxy)phenyl]urea 284670-98-0P, N,N'-Bis[4-[2-(N-
methylcarbamoyl)-4-pyridyloxy]phenyl]urea 432050-17-4P
                                                           432050-18-5P
432050-19-6P, N,N'-Bis(2-methoxy-3-quinolinyl)urea 432050-20-9P
432050-21-0P, N-[5-Trifluoromethyl-2-pyridyl]-N'-[3-(4-
                         432050-22-1P, N-(2-Methoxy-3-quinolinyl)-N'-[4-
pyridylthio)phenyl]urea
(2-(N-Methylcarbamyl)-4-pyridyloxy)phenyl]urea 432050-23-2P,
N-(2-Methoxy-3-quinoly1)-N'-[4-[3-(N-methylcarbamoy1)phenoxy]phenyl]urea
432050-24-3P, N-(2-Methoxy-3-quinoly1)-N'-[4-(2-carbamoy1-4-
                        432050-25-4P, N-(2-Methoxy-3-quinolyl)-N'-[3-[2-
pyridyloxy)phenyl]urea
(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea 432050-26-5P,
N-(2-Methoxy-3-quinoly1)-N'-[3-(2-carbamoy1-4-pyridyloxy)pheny1]urea
432050-27-6P, N-(2-Methoxy-3-quinoly1)-N'-[4-[3-(N-
isopropylcarbamoyl)phenoxy]phenyl]urea
                                        432050-28-7P,
N-(2-Methoxy-3-quinolyl)-N'-[4-[4-methoxy-3-(N-
                                     432050-29-8P, N-(3-Isoquinoly1)-N'-
methylcarbamoyl)phenoxy]phenyl]urea
                                                    432050-30-1P,
[4-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea
                                                       432050-31-2P,
N-(4-tert-Butyl-2-pyridinyl)-N'-(4-methylphenyl)urea
N-(4-tert-Butyl-2-pyridinyl)-N'-(4-fluorophenyl)urea
                                                       432050-32-3P,
N-(4-tert-Butyl-2-pyridinyl)-N'-(1-naphthyl)urea
                                                   432050-33-4P,
N-(4-tert-Butyl-2-pyridinyl)-N'-[4-(4-methoxyphenoxy)phenyl]urea
432050-34-5P, N-(5-Trifluoromethyl-2-pyridinyl)-N'-[4-(4-
pyridylmethyl)phenyl]urea 432050-35-6P, N-(3-Isoquinolyl)-N'-(4-
                    432050-36-7P, N-(3-Isoquinoly1)-N'-(4-
methylphenyl)urea
                  432050-37-8P, N-(3-Isoquinoly1)-N'-(2,3-
fluorophenyl)urea
                     432050-38-9P, N-(3-Isoquinolyl)-N'-(1-naphthyl)urea
dichlorophenyl)urea
432050-39-0P, N-(3-Isoquinoly1)-N'-[4-(4-pyridinylmethy1)pheny1]urea
432050-40-3P, N-(3-Quinolyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea 432050-41-4P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-(4-
methylphenoxy)phenyl)urea 432050-42-5P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-
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·IT

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(4-pyridyloxy)phenyl)urea 432050-43-6P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-
     (4-pyridinylthio)phenyl)urea 432050-44-7P, N-(4-tert-Butyl-2-pyridyl)-N'-
     (3-(4-pyridinylthio)phenyl)urea 432050-45-8P 432050-46-9P
     432050-47-0P 432050-48-1P 432050-49-2P 432050-50-5P
     N-(1-(4-Methyl-1-piperazinyl)isoquinol-3-yl)-N'-(4-(4-
     pyridy1)methyl)phenyl)urea 432050-52-7P, N-(Isoquinol-3-yl)-N'-(4-(3-
     (methylcarbamoyl)phenoxy)phenyl)urea 432050-53-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors)
                                          86-84-0, 1-Naphthyl isocyanate
ΙT
     75-31-0, Isopropylamine, reactions
     98-98-6, Picolinic acid 100-11-8, 4-Nitrobenzyl bromide 100-15-2, N-Methyl-4-nitroaniline 101-77-9, 4,4'-Methylenedianiline 101-79-1,
     4-(4-Chlorophenoxy) aniline 106-44-5, 4-Methylphenol, reactions
                                                              139-59-3,
     109-00-2, 3-Hydroxypyridine 123-30-8, 4-Aminophenol
     4-Phenoxyaniline 150-76-5, 4-Methoxyphenol 288-32-4, Imidazole,
                                                      400-74-8,
     reactions 350-46-9, 1-Fluoro-4-nitrobenzene
     2-Fluoro-5-nitrobenzotrifluoride 580-17-6, 3-Aminoquinoline
     1-Bromo-3-nitrobenzene 591-27-5, 3-Aminophenol 610-35-5,
     4-Hydroxyphthalic acid 620-95-1, 3-Benzylpyridine 622-58-2, 4-Tolyl
                  624-28-2, 2,5-Dibromopyridine 626-61-9, 4-Chloropyridine
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     626-64-2, 4-Hydroxypyridine 872-31-1, 3-Bromothiophene 1083-48-3,
     4-(4-Nitrobenzyl)pyridine 1121-78-4, 5-Hydroxy-2-methylpyridine
     1193-02-8, 4-Aminothiophenol 1195-45-5, 4-Fluorophenyl isocyanate 1849-36-1, 4-Nitrothiophenol 2033-89-8, 3,4-Dimethoxyphenol 2103
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     2-Mercapto-4-phenylthiazole 3678-63-5, 4-Chloro-2-methylpyridine
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     4595-59-9, 5-Bromopyrimidine 7379-35-3, 4-Chloropyridine hydrochloride 7781-98-8, Ethyl 3-hydroxybenzoate 16588-75-3, 2-Methoxy-5-
                                          21101-60-0,
     (trifluoromethyl)phenyl isocyanate
     4-(4-Nitrophenylthio)phenol 22948-02-3, 3-Aminothiophenol 24424-99-5,
     Di-tert-butyl dicarbonate 25267-27-0, Iodobutane
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     3-Aminoisoquinoline 27163-00-4, 4-[(4-Methoxyphenyl)methylamino]aniline
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     4-(4-Methylthiophenoxy)-1-nitrobenzene 41195-90-8, 2,3-Dichlorophenyl
     isocyanate 41295-20-9, 4-(4-Methylphenoxy)aniline
                                                            53750-66-6,
     4-Chloropyridine-2-carbonyl chloride 73322-01-7, 4-(2-Pyridinylthio)-1-
     nitrobenzene 74784-70-6, 2-Amino-5-(trifluoromethyl)pyridine
     150009-83-9, 3-Amino-2-methoxyquinoline 170893-64-8,
     4-(4-Pyridylcarbonyl)aniline
                                    362688-26-4, 1-(4-Methylpiperazinyl)-3-
     aminoisoquinoline
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors)
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     2000-499051 [44] WPIX
AN
     2000-499086 [44]; 2002-627516 [67]; 2003-067622 [06]
CR
DNC
     C2000-149713
     Method of treating a disease mediated by p38 kinase within a host
     comprises administration of urea derivatives e.g. for the treatment of
     cancer or arthritis.
DC
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     DUMAS, J; KHIRE, U; LOWINGER, T B; MONAHAN, M; NATERO, R; RENICK, J; RIEDL, B; SCOTT, W J; SIBLEY, R N; SMITH, R A; WOOD, J E; GUNN, D E;
ΤN
     HATOUM-MOKDAD, H; NAERO, R; WILLIAM, S J
     (FARB) BAYER CORP; (DUMA-I) DUMAS J; (KHIR-I) KHIRE U; (LOWI-I) LOWINGER T
PΑ
     B; (MONA-I) MONAHAN M; (NAER-I) NAERO R; (RENI-I) RENICK J; (RIED-I) RIEDL
     B; (SIBL-I) SIBLEY R N; (SMIT-I) SMITH R A; (WILL-I) WILLIAM S J; (WOOD-I)
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     2001-778039 20010207, US 2001-838286 20010420; MX 2001007120 A1 MX
     2001-7120 20010712; JP 2002534468 W JP 2000-593309 20000113, WO 2000-US768
     20000113; US 2003105091 A1 Provisional US 1999-115878P 19990113, CIP of US
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20020304;

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     ICM A61K031-17; A61K031-506; A61K031-535; A61K031-54; C07D213-63
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          A61K031-4709; A61K031-4725; A61K031-495; A61K031-497; A61K031-50;
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ICA
          C07D213-81; C07D307-14; C07D401-12
     WO 200041698 A UPAB: 20040915
AB
     NOVELTY - Method of treating a disease mediated by p38 kinase within a
     host comprises administration of urea derivatives (I) or their salts.
          DETAILED DESCRIPTION - Method of treating a disease mediated by p38
     kinase within a host comprises administration of urea derivatives of
     formula (I) or their salts.
     D' = NHC(O)NH;
          A = L - (M-L1)q which contains up to 40 carbon atoms;
          L = 5-6 membered cyclic structure bound to D' containing 0-4 O, N and
     S, optionally substituted by Y';
          L1 = at least 5 membered cyclic group containing 0-4 O, N and S,
     optionally substituted by L' or Y';
          M = bridging group of at least one atom;
     q = 1-3;
          B' = mono-, di or tricyclic aryl or heteroaryl group which contains
     up to 30 carbon atoms with at least one 6-membered cyclic group containing
     0-4 N, O and S bound directly to D' all optionally substituted by Y';
          L' = SO2Rx, C(O)Rx, C(NRy)Rz;
     Ry = H \text{ or } R';
          R' = a group containing up to 24 carbon atoms, optionally containing
     N, S and O optionally substituted by halo;
          Rz = H or a group containing up to 30 carbon atoms, optionally
     containing N, S and O and optionally substituted by halo, OH or R';
          Rx = Rz \text{ or } NRaRb;
          Ra, Rb = H, a group containing up to 30 carbon atoms, optionally
     containing N, S and O and optionally substituted by halo, OH or R', or
     osi(Rf)3;
          Rf = H or a group containing up to 30 carbon atoms, optionally
     containing N, S and O and optionally substituted by halo, OH or R'; or
          Ra + Rb = 5-7 membered heterocycle containing 1-3 N, S and O,
     optionally substituted by halo, OH or R'; or
          Ra or Rb = C(O) or 1-5C alkylene (optionally substituted with halo,
     OH or R') bound to L to form an at least 5 membered cyclic structure;
          Y' = halo or (W')n;
          W' = CN, C(0)OR7, C(0)NR7R7, NO2 C(0)R7, OR7, SR7, NR7R7, NR7C(0)OR7,
     Q-Ar' or a group containing up to 24 carbon atoms, optionally containing
     N, S and O and optionally substituted by CN, C(O)OR7, C(O)NR7R7, C(O)R7,
     OR7, SR7, NR7R7, NO2, NR7C(O)R7, NR7C(O)OR7 or halo;
     R7 = H \text{ or } R^{\dagger};
          Q = O, S, N(R7), (CH2)m, C(O), CH(OH), (CH2)mO, (CH2)mS, (CH2)mN(R7),
     O(CH2)m, CHXa, CH(Xa)2, S(CH2)m and NR7(CH2)m;
     m = 1-3;
     Xa = halo;
          Ar' = 5-6 membered aromatic containing 0-2 N, O, S optionally
     substituted by halo or (Z')n; and
          Z' = CN, C(O)OR7, C(O)NR7R7, NO2, OR7, SR7, NR7R7, NR7C(O)OR7 or a
     group containing up to 24 carbon atoms, optionally containing N, S and O
     and optionally substituted by CN, C(0)OR7, C(0)NR7R7, C(0)R7, OR7, SR7,
     NR7R7, NO2, NR7C(O)R7 or NR7C(O)OR7.
          ACTIVITY - Cytostatic; osteopathic; antiarthritic; antirheumatic;
     antibacterial; immunosuppressive; antiarteriosclerotic; neuroprotective;
     antiinflammatory; gastrointestinal; respiratory; hepatotropic;
     protozoacide; antidiabetic; cerebroprotective; vulnerary, radioprotective;
     dermatological.
          MECHANISM OF ACTION - P38 kinase inhibitor; tumor necrosis factor
     alpha (TNF alpha ) inhibitor; matrix-destroying metalloprotease (MMP)
```

inhibitor.

No compound specific biological data given. P38 kinase inhibitory activity was determined using recombinant human p38 (0.5 mu g/ml) mixed with a substrate of myelin basic protein (5 mu q/ml) in kinase buffer and 33P-labeled ATP. The amount of radioactivity incorporated into the substrate was measured. (I) showed p38 IC50 values of 1 nm - 10 mu m.

USE - (I) are used in the treatment of cancerous growth mediated by p38 kinase and in the treatment of rheumatoid arthritis, osteoarthritis, septic arthritis, tumor metastasis, periodontal disease, corneal ulceration, proteinuria, coronary thrombosis from atherosclerotic plaque, aneurysmal aortic birth control, dystrophobic epidermolysis bullosa, degenerative cartilage loss following traumatic joint injury, osteopenias mediated by matrix-destroying metalloprotease (MMP) activity, temperomandibular joint disease, demyelating disease of the nervous system, rheumatic fever, bone reabsorption, postmenopausal osteoporosis, sepsis, gram negative sepsis, septic shock, systemic inflammatory response syndrome, inflammatory bowel syndrome, inflammatory bowel disease, Jarisch-Herxheimer reaction, asthma, adult respiratory distress syndrome, acute pulmonary fibrotic disease, pulmonary sarcoidosis, allergic respiratory disease, silicosis, alveolar injury, hepatic failure, liver disease during acute inflammation, severe alcoholic hepatitis, malaria, non-insulin-dependant diabetes mellitus (NIDDM), congestive heart failure, atherosclerosis, Alzheimer's disease, acute encephalitis, brain injury, multiple sclerosis, lymphoid malignancy, pancreatitis, impaired wound healing in infection, inflammation and cancer, myelodysplastic syndrome, systemic lupus erthematosus, billary cirrhosis, bowel necrosis, psoriasis, radiation injury/toxicity following administration of monoclonal antibodies, host-versus-graft reaction, lung allograft rejection or complications following hip replacement (claimed).

ADVANTAGE - Unlike prior art compositions for treating osteoarthritis, rheumatoid arthritis and septic arthritis p38 kinase inhibitors halt or reverse the progression of cartilage loss and remove or delay the need for surgical intervention. (I) are less toxic than prior art p38 kinase inhibitors. Dwg.0/0

FS CPI

FA AB; GI; DCN

MC CPI: B06-H; B07-H; B10-A13D; B14-A01; B14-A03B; B14-C03; B14-C09; B14-D07C; B14-E10; B14-F07; B14-F10; B14-G02; B14-H01; B14-J01A; B14-J01B; B14-K01A; B14-K01B; B14-L06; B14-N17A; B14-N17B; B14-N17C; B14-S04

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1-(4-(3-(ethylcarbamoyl)-4-methoxyphenoxy)phenyl)-3-(2-methoxyquinolin-3-yl)urea $$C_{27}H_{26}N_4O_5$$

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L55 ANSWER 1 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN 774552-58-8 REGISTRY RN Entered STN: 04 Nov 2004 ED CN Urea, N-(4-methylphenyl)-N'-3-quinolinyl- (9CI) (CA INDEX NAME) FS 3D CONCORD MF C17 H15 N3 O Chemical Library SR Supplier: Scientific Exchange, Inc. LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

MF C22 H18 N4 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 3 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-39-0 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-3-isoquinolinyl-N'-[4-(4-pyridinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(3-Isoquinolyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea

FS 3D CONCORD

MF C22 H18 N4 O .

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 4 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-38-9 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-3-isoquinolinyl-N'-1-naphthalenyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(3-Isoquinolyl)-N'-(1-naphthyl)urea

FS 3D CONCORD

MF C20 H15 N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 5 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

432050-37-8 REGISTRY RN

Entered STN: 19 Jun 2002

Urea, N-(2,3-dichlorophenyl)-N'-3-isoquinolinyl- (9CI) (CA INDEX NAME) CN

OTHER NAMES:

N-(3-Isoquinolyl)-N'-(2,3-dichlorophenyl)urea CN

3D CONCORD FS

C16 H11 Cl2 N3 O MF

SR CA

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 6 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN

432050-36-7 REGISTRY Entered STN: 19 Jun 2002 ED

Urea, N-(4-fluorophenyl)-N'-3-isoquinolinyl- (9CI) (CA INDEX NAME) CN

OTHER NAMES:

N-(3-Isoquinolyl)-N'-(4-fluorophenyl)urea CN

FS 3D CONCORD

MF C16 H12 F N3 O

SR CA

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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RN 432050-35-6 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-3-isoquinolinyl-N'-(4-methylphenyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(3-Isoquinoly1)-N'-(4-methylphenyl)urea

FS 3D CONCORD

MF C17 H15 N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 8 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-33-4 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-[4-(1,1-dimethylethyl)-2-pyridinyl]-N'-[4-(4-methoxyphenoxy)phenyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(4-tert-Butyl-2-pyridinyl)-N'-[4-(4-methoxyphenoxy)phenyl]urea

FS 3D CONCORD

MF C23 H25 N3 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 9 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-32-3 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-[4-(1,1-dimethylethyl)-2-pyridinyl]-N'-1-naphthalenyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(4-tert-Butyl-2-pyridinyl)-N'-(1-naphthyl)urea

FS 3D CONCORD

MF C20 H21 N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 10 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-31-2 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-[4-(1,1-dimethylethyl)-2-pyridinyl]-N'-(4-fluorophenyl)-

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(4-tert-Butyl-2-pyridinyl)-N'-(4-fluorophenyl)urea

FS 3D CONCORD

MF C16 H18 F N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

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L55 ANSWER 11 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-30-1 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-[4-(1,1-dimethylethyl)-2-pyridinyl]-N'-(4-methylphenyl)-

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(4-tert-Butyl-2-pyridinyl)-N'-(4-methylphenyl)urea

FS 3D CONCORD

MF C17 H21 N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 12 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-29-8 REGISTRY

ED Entered STN: 19 Jun 2002

CN 2-Pyridinecarboxamide, 4-[4-[[(3-isoquinolinylamino)carbonyl]amino]ph

enoxy]-N-methyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(3-Isoquinoly1)-N'-[4-[2-(N-methylcarbamoy1)-4-pyridyloxy]phenyl]urea

FS 3D CONCORD

MF C23 H19 N5 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 13 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-27-6 REGISTRY

ED Entered STN: 19 Jun 2002

CN Benzamide, 3-[4-[[[(2-methoxy-3-quinolinyl)amino]carbonyl]amino]phenoxy]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinoly1)-N'-[4-[3-(N-isopropylcarbamoy1)phenoxy]phenyl]ure

FS 3D CONCORD

MF C27 H26 N4 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 14 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-26-5 REGISTRY

ED Entered STN: 19 Jun 2002

CN 2-Pyridinecarboxamide, 4-[3-[[[(2-methoxy-3-

quinolinyl)amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinolyl)-N'-[3-(2-carbamoyl-4-pyridyloxy)phenyl]urea

FS 3D CONCORD

MF C23 H19 N5 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 15 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-25-4 REGISTRY

ED Entered STN: 19 Jun 2002

CN 2-Pyridinecarboxamide, 4-[3-[[[(2-methoxy-3-

quinolinyl)amino]carbonyl]amino]phenoxy]-N-methyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinoly1)-N'-[3-[2-(N-methylcarbamoy1)-4pyridyloxy]pheny1]urea

FS 3D CONCORD

MF C24 H21 N5 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L55 ANSWER 16 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 432050-24-3 REGISTRY
- ED Entered STN: 19 Jun 2002
- CN 2-Pyridinecarboxamide, 4-[4-[[[(2-methoxy-3-

quinolinyl)amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinoly1)-N'-[4-(2-carbamoy1-4-pyridyloxy)phenyl]urea

FS 3D CONCORD

MF C23 H19 N5 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 17 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-23-2 REGISTRY

ED Entered STN: 19 Jun 2002

CN Benzamide, 3-[4-[[[(2-methoxy-3-quinolinyl)amino]carbonyl]amino]pheno xy]-N-methyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinoly1)-N'-[4-[3-(N-methylcarbamoy1)phenoxy]phenyl]urea

FS 3D CONCORD

MF C25 H22 N4 O4

SR C

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 4 REFERENCES IN FILE CA (1907 TO DATE)
- 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 18 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-22-1 REGISTRY

ED Entered STN: 19 Jun 2002

CN 2-Pyridinecarboxamide, 4-[4-[[[(2-methoxy-3-cuinolinyl)aminolcarbonyl]aminolphenoxyl-N-methyl-(9CI) (CA

quinolinyl)amino]carbonyl]amino]phenoxy]-N-methyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(2-Methoxy-3-quinolinyl)-N'-[4-(2-(N-Methylcarbamyl)-4-

pyridyloxy) phenyl] urea

FS 3D CONCORD

MF C24 H21 N5 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 19 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 432050-17-4 REGISTRY

ED Entered STN: 19 Jun 2002

CN Urea, N-(2,3-dichlorophenyl)-N'-[4-(1,1-dimethylethyl)-2-pyridinyl](9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(4-tert-Butylpyridyl)-N'-(2,3-dichlorophenyl)urea

FS 3D CONCORD

MF C16 H17 Cl2 N3 O

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L55 ANSWER 20 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 413613-26-0 REGISTRY

ED Entered STN: 12 May 2002

CN Urea, N-1-naphthalenyl-N'-3-quinolinyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H15 N3 O

SR Chemical Library

Supplier: ChemBridge Corporation

LC STN Files: CHEMCATS

L55 ANSWER 21 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 309284-04-6 REGISTRY

ED Entered STN: 18 Dec 2000

CN Urea, N-(4-fluorophenyl)-N'-3-quinolinyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H12 F N3 O

SR Chemical Library

Supplier: ChemDiv, Inc.

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L55 ANSWER 22 OF 22 REGISTRY COPYRIGHT 2005 ACS on STN

RN 304510-28-9 REGISTRY

ED Entered STN: 27 Nov 2000

CN Urea, N-4-isoquinolinyl-N'-1-naphthalenyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H15 N3 O

SR Chemical Library

Supplier: AsInEx

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> d his full

(FILE 'HOME' ENTERED AT 09:19:30 ON 06 JUN 2005)

FILE 'HCAPLUS' ENTERED AT 09:19:43 ON 06 JUN 2005

L1 1 SEA ABB=ON PLU=ON US20020065296/PN OR US99-115878/AP,PRN

FILE 'REGISTRY' ENTERED AT 09:20:28 ON 06 JUN 2005

FILE 'HCAPLUS' ENTERED AT 09:20:29 ON 06 JUN 2005

L2 TRA L1 1- RN : 157 TERMS

FILE 'REGISTRY' ENTERED AT 09:20:30 ON 06 JUN 2005

Search done by Noble Jarrell

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L3
             157 SEA ABB=ON PLU=ON L2
     FILE 'WPIX' ENTERED AT 09:20:35 ON 06 JUN 2005
L4
               1 SEA ABB=ON PLU=ON US20020065296/PN OR US99-115878/AP, PRN
     FILE 'REGISTRY' ENTERED AT 10:09:52 ON 06 JUN 2005
L5
              78 SEA ABB=ON PLU=ON L3 AND NC5/ES
              13 SEA ABB=ON PLU=ON L5 AND NC5-C6/ES
L6
               5 SEA ABB=ON PLU=ON L3 AND NR=4 AND 2 46.150.18/RID AND
L7
                 NC5-C6/ES
               O SEA ABB=ON PLU=ON L3 AND N(1A)ETHYL
QUE ABB=ON PLU=ON (PMS OR MAN OR IDS)/CI OR COMPD OR
T.R
L9
                 COMPOUND OR UNSPECIFIED OR (D OR T)/ELS
             458 SEA ABB=ON PLU=ON C17H21N3O AND NR=2
T-10
             106 SEA ABB=ON PLU=ON L10 AND NC5/ES AND 46.150.18/RID
T.11
L12
             103 SEA ABB=ON PLU=ON L11 NOT L9
               7 SEA ABB=ON PLU=ON L12 AND DIMETHYLETHYL
L13
                 SEL RN 2 L13
L14
               1 SEA ABB=ON PLU=ON 432050-30-1/BI AND L13
               9 SEA ABB=ON PLU=ON C16H18FN3O AND NR=2 AND NC5/ES AND
L15
                 46.150.18/RID
               1 SEA ABB=ON PLU=ON L15 AND UREA
L16
              12 SEA ABB=ON PLU=ON C16H17CL2N3O AND NR=2 AND NC5/ES AND
L17
                 46.150.18/RID
              1 SEA ABB=ON PLU=ON L17 AND UREA
L18
              3 SEA ABB=ON PLU=ON L3 AND C6-C6/ES
L19
             111 SEA ABB=ON PLU=ON C20H21N3O AND NR=3 AND NC5/ES
L20
             3 SEA ABB=ON PLU=ON L20 AND C6-C6/ES
1 SEA ABB=ON PLU=ON 432050-32-3/BI AND L21
488 SEA ABB=ON PLU=ON C23H25N3O3 AND NR=3
81 SEA ABB=ON PLU=ON L23 AND NC5/ES AND 2 46.150.18/RID
L21
L22
L23
L24
              81 SEA ABB=ON PLU=ON L24 NOT L9
L25
               5 SEA ABB=ON PLU=ON L25 AND UREA AND METHOXYPHEN?
L26
                 SEL RN 3 L26
            1 SEA ABB=ON PLU=ON 432050-33-4/BI AND L26
1392 SEA ABB=ON PLU=ON C17H15N3O NOT L9
L27
L28
             124 SEA ABB=ON PLU=ON L28 AND NR=3 AND NC5-C6/ES AND 46.150.18/RI
L29
                 D
              20 SEA ABB=ON PLU=ON L29 AND UREA
L30
                 D STR TOT
                 SEL RN L30 1 10
               2 SEA ABB=ON PLU=ON (432050-35-6/BI OR 774552-58-8/BI) AND L30
L31
              12 SEA ABB=ON PLU=ON C16H12FN3O AND NR=3 AND NC5-C6/ES AND
L32
                 46.150.18/RID
                 SEL RN 4 8 L32
              2 SEA ABB=ON PLU=ON (309284-04-6/BI OR 432050-36-7/BI) AND L32
24 SEA ABB=ON PLU=ON C16H11CL2N3O AND NC5-C6/ES AND 46.150.18/RI
L33
L34
                 D
                 SEL RN L34 10
L35
               1 SEA ABB=ON PLU=ON 432050-37-8/BI AND L34
              17 SEA ABB=ON PLU=ON C20H15N3O AND C6-C6/ES AND NC5-C6/ES AND
L36
                 NR=4
                 D STR TOT
                 SEL RN 2 4 5 L36
               3 SEA ABB=ON PLU=ON (304510-28-9/BI OR 413613-26-0/BI OR
L37
                 432050-38-9/BI) AND L36
              23 SEA ABB=ON PLU=ON C22H18N4O AND NR=4 AND NC5-C6/ES AND
L38
                 NC5/ES AND 46.150.18/RID
                 D SCA
               2 SEA ABB=ON PLU=ON L38 AND UREA AND PYRIDINYLMETHYL
L39
                 D SCA
                 D COS
            1130 SEA ABB=ON PLU=ON (C25H22N4O4 OR C24H21N5O4 OR C24H21N5O4 OR
L40
                 C24H21N5O4 OR C23H19N5O4 OR C27H26N4O4 OR C27H26N4O5 OR
                 C23H19N5O3) AND NR=4 NOT L9
              60 SEA ABB=ON PLU=ON L40 AND NC5-C6/ES AND (2 46.150.18/RID OR
L41
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Kwon 09/838286 Page 12

NC5/ES AND 46.150.18/RID) SEL RN L41 33 29 30 L42 3 SEA ABB=ON PLU=ON (432050-24-3/BI OR 432050-27-6/BI OR 432050-29-8/BI) AND L41 8 SEA ABB=ON PLU=ON C25H22N4O4 AND 2 46.150.18/RID AND L43 NC5-C6/ES D SCA 1 SEA ABB=ON PLU=ON L43 AND BENZAMIDE L44 4 SEA ABB=ON PLU=ON C24H21N5O4 AND NR=4 AND NC5-C6/ES AND L45 46.150.18/RID AND NC5/ES 2 SEA ABB=ON PLU=ON L45 AND PYRIDINECARBOXAMIDE 4 SEA ABB=ON PLU=ON C24H21N5O4 AND NC5-C6/ES AND NC5/ES AND L46 L47 46.150.18/RID 12 SEA ABB=ON PLU=ON L3 AND NC5-C6/ES AND NC5/ES AND 46.150.18/R L48 ID AND NR=4 L49 3 SEA ABB=ON PLU=ON C23H19N5O4 AND NR=4 AND NC5-C6/ES AND NC5/ES AND 46.150.18/RID 2 SEA ABB=ON PLU=ON L49 AND PYRIDINECARBOXAMIDE 9 SEA ABB=ON PLU=ON C27H26N4O5 AND NR=4 AND 2 46.150.18/RID L50 L51 AND NC5-C6/ES L52 262 SEA ABB=ON PLU=ON C23H19N5O3 6 SEA ABB=ON PLU=ON L52 AND NR=4 AND NC5/ES AND NC5-C6/ES AND L53 46.150.18/RID 1 SEA ABB=ON PLU=ON L53 AND PYRIDINECARBOXAMIDE 22 SEA ABB=ON PLU=ON L14 OR L16 OR L18 OR L22 OR L27 OR L31 OR L54 L55 L33 OR L35 OR L37 OR L39 OR L42 OR L44 OR L46 OR L50 OR L54 FILE 'HCAPLUS' ENTERED AT 11:42:46 ON 06 JUN 2005 L56 6 SEA ABB=ON PLU=ON L55 FILE 'HCAOLD' ENTERED AT 11:43:28 ON 06 JUN 2005 O SEA ABB=ON PLU=ON L55 L57 FILE 'HCAPLUS' ENTERED AT 11:53:12 ON 06 JUN 2005 E DUMAS J/AU L58 427 SEA ABB=ON PLU=ON ("DUMAS J"/AU OR "DUMAS J B"/AU OR "DUMAS J C"/AU OR "DUMAS J F"/AU OR "DUMAS J G"/AU OR "DUMAS J I"/AU OR "DUMAS J J"/AU OR "DUMAS J L"/AU OR "DUMAS J M"/AU OR "DUMAS J P"/AU OR "DUMAS J R"/AU OR "DUMAS J R DEGORCE"/AU) E DUMAS JACQUES/AU 104 SEA ABB=ON PLU=ON ("DUMAS JACQUES"/AU OR "DUMAS JACQUES L59 P"/AU) E RIEDL B/AU 1.60 170 SEA ABB=ON PLU=ON ("RIEDL B"/AU OR "RIEDL BAUCH VACLAV"/AU OR "RIEDL BERNARD"/AU OR "RIEDL BERNARD Y"/AU OR "RIEDL BERND"/AU) E KHIRE U/AU L61 43 SEA ABB=ON PLU=ON ("KHIRE U R"/AU OR "KHIRE UDAY"/AU OR "KHIRE UDAY R"/AU) E MOKDAD H/AU 1 SEA ABB=ON PLU=ON "MOKDAD H"/AU L62 E HATOUM MOKDAD/AU L63 28 SEA ABB=ON PLU=ON ("HATOUM MOKDAD H"/AU OR "HATOUM MOKDAD HOLIA"/AU OR "HATOUM MOKDAD HOLIA N"/AU) E MONAHAN K/AU E MONAHAN M/AU 37 SEA ABB=ON PLU=ON ("MONAHAN M"/AU OR "MONAHAN M K"/AU OR L64 "MONAHAN MARY K"/AU OR "MONAHAN MARY KATHERINE"/AU OR "MONAHAN MARY KATHERINE C"/AU OR "MONAHAN MARY KETHERINE"/AU) E LOWINGER T/AU L65 46 SEA ABB=ON PLU=ON ("LOWINGER T B"/AU OR "LOWINGER TIMOTHY"/AU OR "LOWINGER TIMOTHY B"/AU OR "LOWINGER TIMOTHY BRUNO"/AU OR "LOWINGER TIMOTTHY B"/AU) E SCOTT W/AU

158 SEA ABB=ON PLU=ON ("SCOTT W"/AU OR "SCOTT W J"/AU OR "SCOTT

W J JR"/AU OR "SCOTT W J M"/AU OR "SCOTT W J MERLE"/AU OR

L66

Kwon 09/838286 Page 13

"SCOTT W JAMES"/AU OR "SCOTT W JOHN H"/AU) E SCOTT WILL/AU

L67

225 SEA ABB=ON PLU=ON ("SCOTT WILLIAM"/AU OR "SCOTT WILLIAM
J"/AU OR "SCOTT WILLIAM J JR"/AU OR "SCOTT WILLIAM JAMES"/AU
OR "SCOTT WILLIAM JAMES JR"/AU OR "SCOTT WILLIAM JOHNSTON"/AU
OR "SCOTT WILLIAM JOSEPH"/AU OR "SCOTT WILLIAM JR"/AU)
E SMITH R/AU

L68

1107 SEA ABB=ON PLU=ON ("SMITH R"/AU OR "SMITH R A"/AU OR "SMITH R A A"/AU OR "SMITH R A D"/AU OR "SMITH R A G"/AU OR "SMITH R A H"/AU OR "SMITH R A J"/AU OR "SMITH R A L"/AU OR "SMITH R A W"/AU OR "SMITH R ABBEY"/AU OR "SMITH R ANDREW"/AU OR "SMITH R ARNOLD"/AU)

ROWSEN AND RESERVANT

E SMITH ROGER/AU
SEA ABREON PLUEON ("SMITH R

L69 293 SEA ABB=ON PLU=ON ("SMITH ROGER"/AU OR "SMITH ROGER A"/AU OR "SMITH ROGER ALTON"/AU OR "SMITH ROGER ASTBURY"/AU)

E WOOD J/AU

L70 308 SEA ABB=ON PLU=ON ("WOOD J"/AU OR "WOOD J E"/AU OR "WOOD J E
JR"/AU OR "WOOD J EDWIN"/AU OR "WOOD J EDWIN JR"/AU OR "WOOD J
ELDRIDGE"/AU)
E WOOD J/AU

E WOOD J/AU
E WOOD JILL/AU

L71 35 SEA ABB=ON PLU=ON ("WOOD JILL"/AU OR "WOOD JILL E"/AU OR "WOOD JILL ELIZABETH"/AU)

L72 45365 SEA ABB=ON PLU=ON BAYER/CS,PA

L73 5 SEA ABB=ON PLU=ON L56 AND (L58 OR L59 OR L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71)

=> b hcap

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L75 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:874973 HCAPLUS

DN 139:364831

ED Entered STN: 07 Nov 2003

TI Preparation of quinolyl, isoquinolyl or pyridyl ureas as inhibitors of rafkinase using

```
IN
      Dumas, Jacques; Riedl, Bernd; Khire, Uday;
      Sibley, Robert N.; Hatoum-Mokdad, Holia; Monahan,
      Mary-Katherine; Gunn, David E.; Lowinger, Timothy B.;
      Scott, William J.; Smith, Roger A.; Wood, Jill
 PΑ
      Bayer Corporation, USA
 SO
      U.S. Pat. Appl. Publ., 26 pp.
      CODEN: USXXCO
 DT
      Patent
 LΑ
      English
      ICM C07D041-02
 TC
      ICS A61K031-4709; A61K031-4439
 INCL 514307000; 514313000; 546159000; 546143000; 514310000; 514336000;
      546268100
      27-16 (Heterocyclic Compounds (One Hetero Atom))
      Section cross-reference(s): 1, 7
 FAN.CNT 1
                           KIND
                                  DATE
                                              APPLICATION NO.
                                                                      DATE
      PATENT NO.
       - - - - - - - - - - - - - - -
                                               _____
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                           ----
                                              US 2002-125369
      US 2003207914
                                  20031106
                                                                      20020419
                           A1
PRAI US 2001-367376P
                           P
                                  20010420
 CLASS
  PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
  US 2003207914
                  ICM
                          C07D041-02
                          A61K031-4709; A61K031-4439
                  TCS
                  INCL
                          514307000; 514313000; 546159000; 546143000; 514310000;
                          514336000; 546268100
  US 2003207914
                  NCL .
                          514/307.000; 514/313.000; 546/159.000; 546/143.000;
                          514/310.000; 514/336.000; 546/268.100
C07D213/40B; C07D215/38C; C07D401/12+217+213;
                  ECLA
                          C07D401/12+215+213
 OS
      MARPAT 139:364831
      Urea derivs. of general formula A-NHCONH-B, A'-CONH-B', and A''-NHCONH-B"
 AB
      or pharmaceutically acceptable salts thereof [wherein A = each
      (un) substituted tert-butylpyridyl, (trifluoromethyl) pyridyl,
      isopropylpyridyl, 2-methyl-2-butylpyridyl, or 3-methyl-3-pentylpyridyl; A'
      = each (un) substituted isoquinolinyl or isoquinolinyl; A" = substituted
      quinolinyl group; B, B' = independently, (un) substituted bridged cyclic
      structure of up to 30 carbon atoms of the formula -L-(ML1)q (wherein L
      comprises a cyclic moiety having at least 5 members and is bound directly
      to D; L1 comprises a cyclic moiety having at least 5 members; M is a
      bridging group having at least one atom, q is an integer of from 1-3, and
      each cyclic structure of L and L1 contains 0-4 members of the group
      consisting of nitrogen, oxygen and sulfur); B" = (un)substituted up to
      tricyclic aryl or heteroaryl moiety of up to 30 carbon atoms with a cyclic
      structure bound directly to D containing at least 5 members with 0-4 members
      of the group consisting of nitrogen, oxygen and sulfur] are prepared These
      compds. are useful in treating raf-mediated diseases, in particular
      cancerous cell growth mediated by a raf kinase. All compds. exemplified,
      e.g. N-(4-tert-Butylpyridyl)-N'-(2,3-dichlorophenyl)urea, displayed IC50
      of between 10 nM and 10 \mu M against ref kinase.
      quinolylurea prepn raf kinase inhibitor; isoquinolylurea prepn raf kinase inhibitor; pyridylurea prepn raf kinase inhibitor; phenylpyridylurea prepn
      raf kinase inhibitor; cancer treatment urea prepn
      Antitumor agents
      Neoplasm
          (preparation of quinolyl, isoquinolyl or pyridyl ureas as inhibitors of raf
         kinase)
 TT
      Gene, animal
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
          (raf, raf-mediated diseases; preparation of quinolyl, isoquinolyl or pyridyl
         ureas as inhibitors of raf kinase)
 IT
      6337-24-2P, 1-Methoxy-4-(4-nitrophenoxy)benzene
                                                        13472-85-0P,
      5-Bromo-2-methoxypyridine 18994-90-6P, 4-(1-Imidazolylmethyl)-1-
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nitrobenzene 27692-74-6P, 4-(4-Pyridinylmethyl)aniline 28232-34-0P,

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28232-52-2P, 3-(3-Pyridinyloxy)-1-
5-Nitro-2-(4-methylphenoxy)pyridine
nitrobenzene 31465-36-8P, 4-(4-Methoxyphenoxy)aniline 32361-76-5P,
3-(4-Nitrobenzyl)pyridine 36089-89-1P, 4-(4-Methylsulfonylphenoxy)-1-
nitrobenzene 51834-97-0P, 5-Hydroxy-2-methoxypyridine 56643-85-7P,
4-(1-Imidazolylmethyl)aniline 62248-47-9P, 4-(4-Butoxyphenyl)thio-1-
nitrobenzene 62248-51-5P, 4-(4-Butoxyphenyl)thioaniline 4-(6-Methyl-3-pyridinyloxy)-1-nitrobenzene 70991-08-1P,
4-(2-Pyridinylthio)aniline 85666-15-5P, 4-(3-Pyridinylmethyl)aniline
92575-23-0P, 3-(4-Pyridinylthio)aniline 116289-71-5P, 3-(3-Pyridinyloxy)aniline 178809-75-1P, 4-[1-Hydroxy-1-(4-
pyridyl)methyl]-1-nitrobenzene 220000-87-3P, 2-(N-Methylcarbamoyl)-4-
chloropyridine
                228401-26-1P, 3-(Trifluoromethyl)-4-(4-
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pyridinylthio)aniline 228401-28-3P, 4-(4-Phenyl-2-thiazolylthio)-1-
nitrobenzene 228401-29-4P, 4-(4-Phenyl-2-thiazolyl)thioaniline
228401-31-8P, 4-(6-Methyl-3-pyridinyloxy)aniline 228401-32-9P,
4-(3,4-Dimethoxyphenoxy)-1-nitrobenzene 228401-33-0P,
4-(3,4-Dimethoxyphenoxy)aniline
                                   228401-36-3P, 5-Amino-2-(4-
methylphenoxy)pyridine dihydrochloride 228401-37-4P,
4-(3-Thienylthio)-1-nitrobenzene 228401-38-5P, 4-(5-
Pyrimidinyloxy)aniline 228401-39-6P, 4-(2-Methoxy-5-pyridyloxy)-1-
               228401-40-9P, 4-(2-Methyl-4-pyridinyloxy) aniline
nitrobenzene
228401-41-0P, Methyl(4-nitrophenyl)-4-pyridylamine 228401-43-2P,
4-(3-Methoxycarbonyl-4-methoxyphenoxy)-1-nitrobenzene 228401-44-3P,
4-(3-Carboxy-4-methoxyphenoxy)-1-nitrobenzene 229003-17-2P,
3-(5-Methyl-3-pyridinyloxy)-1-nitrobenzene 284462-84-6P,
4-(4-Methylsulfonylphenoxy)aniline 432050-13-0P, 4-(3-
                      432050-14-1P, 4-(2-Methoxy-5-pyridyloxy)aniline
Thienylthio) aniline
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432050-15-2P, Methyl(4-aminophenyl)-4-pyridylamine
4-[1-Hydroxy-1-(4-pyridyl)methyl]aniline
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4-(4-tert-Butoxycarbamoylbenzyl)aniline
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4-[[2-(Methylcarbamoyl)-3-pyridyl]oxy]aniline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of quinolyl, isoquinolyl or pyridyl ureas as inhibitors of raf kinase)
139691-76-2, Raf Kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
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432050-17-4P, N-(4-tert-Butylpyridyl)-N'-(2,3-dichlorophenyl)urea
432050-18-5P, N-(4-tert-Butylpyridyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea
432050-19-6P, N,N'-Bis(2-methoxy-3-quinolinyl)urea] 432050-20-9P,
N-(4-tert-Butylpyridyl)-N'-[4-(4-chlorophenoxy)phenyl]urea 432050-21-0P,
N-(5-Trifluoromethyl-2-pyridyl)-N'-[3-(4-pyridylthio)phenyl]urea
432050-22-1P, N-(2-Methoxy-3-quinolinyl)-N'-[4-[2-(N-
Methylcarbamyl) -4-pyridyloxy] phenyl] urea 432050-41-4P
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                               432050-45-8P
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N-[1-(4-Methylpiperazinyl)-3-isoquinolinyl]-N'-[4-(4-
pyridinyloxy)phenyl]urea 620625-86-7P
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(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
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75-44-5, Phosgene
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N-Methyl-4-nitroaniline 101-77-9, 4,4'-Methylenedianiline 101-79-1,
4-(4-Chlorophenoxy) aniline 106-44-5, 4-Methylphenol, reactions 109-00-2, 3-Hydroxypyridine 123-30-8, 4-Aminophenol 139-59-3,
4-Phenoxyaniline 150-76-5, 4-Methoxyphenol 288-32-4, Imidazole,
           350-46-9, 1-Fluoro-4-nitrobenzene 400-74-8,
reactions
2-Fluoro-5-nitrobenzotrifluoride 530-62-1, N,N'-Carbonyldiimidazole 585-79-5, 1-Bromo-3-nitrobenzene 620-95-1, 3-Benzylpyridine 624-24
2,5-Dibromopyridine 626-61-9, 4-Chloropyridine 626-64-2,
4-Hydroxypyridine 673-09-6, 4-(4-Pyridylthio)aniline 872-31-1,
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ΤТ

TT

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3-Bromothiophene 1083-48-3, 4-(4-Nitrobenzyl)pyridine 1121-78-4, 5-Hydroxy-2-methylpyridine 1193-02-8, 4-Aminothiophenol 1849-36-1,
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     2-Chloro-5-nitropyridine 4556-23-4, 4-Mercaptopyridine
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     5-Bromopyrimidine 7379-35-3, 4-Chloropyridine hydrochloride
     21101-60-0, 4-(4-Nitrophenylthio)phenol 22948-02-3, 3-Aminothiophenol
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     Methoxyphenyl)methylamino]aniline 29264-35-5, 4-(3-Carboxy-4-
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     nitrobenzene 74784-70-6, 2-Amino-5-(trifluoromethyl)pyridine
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     3-Amino-2-methoxyquinoline 170893-64-8, 4-(4-Pyridylcarbonyl)aniline
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     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of quinolyl, isoquinolyl or pyridyl ureas as inhibitors of raf
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RN
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    137:352907
ED
    Entered STN: 08 Nov 2002
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    Preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
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    Dumas, Jacques; Riedl, Bernd; Khire, Uday;
TN
    Wood, Jill E.; Robert, Sibley N.; Monahan, Mary-Katherine
     ; Renick, Joel; Gunn, David E.; Lowinger, Timothy B.;
    Scott, William J.; Smith, Roger A.
PΑ
    Bayer Corporation, USA
    U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S. Ser. No. 758,548.
SO
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DT
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Title compds. B-NHCONH-L-(M-L1)q (I) [B = (un) substituted pyridyl, quinolinyl, isoquinolinyl; L = 5 or 6 membered cyclic structure; L1 = substituted cyclic moiety having at least 5 members; M = bridging group having at least one atom; q = 1-3; with proviso that L and L1 contain 0-4 hetero atoms, e.g., N, O and S] and their pharmaceutically acceptable salts were prepared For example, coupling of aniline II, e.g., prepared from Et 3-hydroxybenzoate in 4-steps, with bis(trichloromethyl)carbonate followed by 3-tert-butylaniline afforded urea III. In in vitro raf kinase assays, 112-specific examples of compds. I inhibited kinase activity with IC50 values ranging from 10 nM-10 μM. Compds. I are useful for the treatment of cancerous cell growth mediated by raf kinase.

ST quinoline urea prepn inhibition raf kinase antitumor; isoquinoline urea

preprinting urea preprinting the distribution of kinase antitumor; isoquinoline urea preprinting urea preprinting urea preprinting urea preprinting urea kinase antitumor.

IT Antitumor agents

Combinatorial chemistry

Human

TΤ

Neoplasm

Solid phase synthesis

(preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf kinase)

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  (Uses)
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(drug candidate; preparation of quinolyl, isoquinolyl or pyridyl-ureas as

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inhibitors of raf kinase)
TΤ
     883-62-5P, 3-Methoxy-2-naphthoic acid 13041-60-6P, Methyl
     3-methoxy-2-naphthoate 27237-21-4P, 4-(3-Carboxyphenoxy)-1-nitrobenzene
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     4-Bromo-3-(trifluoromethyl)phenyl isocyanate 50727-06-5P, 5-Hydroxyisoindoline-1,3-dione 51727-15-2P, 4-Chloropyridine-2-carbonyl
     chloride hydrochloride 54579-63-4P, 4-(3-Carboxyphenoxy)aniline
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     119431-22-0P, 3-Chloro-4-(2,2,2-trifluoroacetylamino)phenol
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     4-(2-(N-Methylcarbamoyl)-4-pyridyloxy)aniline
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     5-(4-Nitrophenoxy)isoindoline-1,3-dione 284462-39-1P,
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     1-(4-tert-Butyl-2-nitrophenyl)-2,5-dimethylpyrrole 284462-41-5P,
     5-tert-Butyl-2-(2,5-dimethylpyrrolyl)aniline
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     4-(2-(N-Methylcarbamoyl)-4-pyridyloxy)-2-methylaniline hydrochloride
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     4-(1-Oxoisoindolin-5-yloxy) aniline 284462-55-1P, 4-(3-
     Ethoxycarbonylphenoxy)-1-nitrobenzene 284462-56-2P
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     284462-61-9P, 4-(3-(N-Methylsulfamoyl)phenyloxy)aniline
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IT
     50-21-5, Lactic acid, reactions
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     65-85-0, Benzoic acid, reactions 69-72-7, Salicylic acid, reactions
     75-75-2, Methanesulfonic acid 76-05-1, Trifluoroacetic acid, reactions
     77-92-9, Citric acid, reactions 85-47-2, 1-Naphthalenesulfonic acid 87-69-4, Tartaric acid, reactions 90-64-2, Mandelic acid 98-11-3,
                                      85-47-2, 1-Naphthalenesulfonic acid
     Benzenesulfonic acid, reactions 103-82-2, Phenylacetic acid, reactions
     104-15-4, reactions 110-15-6, Succinic acid, reactions
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     Maleic acid, reactions 110-17-8, Fumaric acid, reactions 120-18-3,
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                                    7664-38-2, Phosphoric acid, reactions
     Hydrochloric acid, reactions
                                           10035-10-6, Hydrobromic acid,
     7664-93-9, Sulphuric acid, reactions
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        (pharmaceutical salt; preparation of quinolyl, isoquinolyl or pyridyl-ureas
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IT
     139691-76-2, Raf kinase
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        (preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
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               98-98-6, Picolinic acid
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chloride

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99-98-9, 4-(Dimethylamino)aniline
                                  100-51-6, Benzyl alcohol, reactions
101-79-1, 4-(4-Chlorophenoxy) aniline 106-50-3, p-Phenylenediamine,
           108-00-9, N, N-Dimethylethylenediamine 108-95-2, Phenol,
reactions
reactions
           109-85-3, 2-Methoxyethylamine 110-13-4, Acetonylacetone
123-30-8, 4-Aminophenol
                        123-39-7, N-Methylformamide
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4-Chloro-3-(trifluoromethyl)aniline 327-78-6, 4-Chloro-3-
(trifluoromethyl)phenyl isocyanate
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(trifluoromethyl)aniline 350-46-9, 1-Fluoro-4-nitrobenzene
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4-Fluoroaniline 393-36-2, 4-Bromo-3-(trifluoromethyl)aniline 407-25-0,
Trifluoroacetic anhydride 462-08-8, 3-Aminopyridine
                                                     503-38-8,
Trichloromethyl chloroformate 610-35-5, 4-Hydroxyphthalic acid
619-08-9, 2-Chloro-4-nitrophenol 626-61-9, 4-Chloropyridine 883-99-8,
Methyl 3-hydroxy-2-naphthoate 1121-78-4, 5-Hydroxy-2-methylpyridine
1193-02-8, 4-Aminothiophenol 1664-40-0, N-Phenylethylenediamine
1877-71-0, Mono-methyl isophthalate 2038-03-1, 4-(2-
Aminoethyl)morpholine 2252-63-3, N-(4-Fluorophenyl)piperazine
2524-67-6, 4-Morpholinoaniline 2835-95-2, 5-Amino-2-methylphenol
2835-99-6, 4-Amino-3-methylphenol 2905-24-0, 3-Bromobenzenesulfonyl
          3535-88-4, 5-Tert-Butyl-2-methoxyaniline
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4-Amino-2-chlorophenol 4548-45-2, 2-Chloro-5-nitropyridine
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Tetrahydrofurfurylamine 5369-19-7, 3-tert-Butylaniline
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2-Nitro-4-tert-butylaniline 6628-77-9, 5-Amino-2-methoxypyridine
           7781-98-8, Ethyl 3-hydroxybenzoate 13154-24-0,
6927-86-2
Triisopropylsilyl chloride 16588-75-3, 2-Methoxy-5-
(trifluoromethyl)phenyl isocyanate 22948-02-3, 3-Aminothiophenol
25900-61-2, 3-Methylcarbamoylaniline 26116-12-1, 2-Aminomethyl-1-
ethylpyrrolidine 27578-60-5, 1-(2-Aminoethyl)piperidine
Methyl 5-hydroxynicotinate 30806-83-8, Ethyl 4-isocyanatobenzoate
33252-26-5, 4-tert-Butyl-2-aminopyridine 34803-66-2,
N-(2-Pyridyl)piperazine 36265-31-3, 4-(4-Methylthiophenoxy)-1-
nitrobenzene 51639-48-6, N-(4-Acetylphenyl)piperazine 106164-64-1
150009-83-9, 3-Amino-2-methoxyquinoline 284462-72-2 284462-73-3,
4-Chloro-N-(2-hydroxyethyl)pyridine-2-carboxamide 284462-74-4,
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432050-22-1 HCAPLUS
2-Pyridinecarboxamide, 4-[4-[[[(2-methoxy-3-quinolinyl)amino]carbonyl]amin
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L75 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN AN 2002:832761 HCAPLUS DN 137:337791

ED Entered STN: 01 Nov 2002

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RN

CN

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Preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
ΤI
      kinase
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      Dumas, Jacques; Riedl, Bernd; Khire, Uday;
      Sibley, Robert N.; Hatoum-Mokdad, Holia; Monahan,
      Mary-Katherine; Gunn, David E.; Lowinger, Timothy B.;
      Scott, William J.; Smith, Roger A.; Wood, Jill
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      PCT Int. Appl., 65 pp.
      CODEN: PIXXD2
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      English
      ICM C07D213-40
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     ICS C07D401-12; C07D215-38; A61K031-44; A61K031-4709; A61K031-4725;
           A61K031-47; A61P043-00
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      27-17 (Heterocyclic Compounds (One Hetero Atom))
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                           4C086/NA14; 4C086/ZB26; 4C086/ZC20
OS
     MARPAT 137:337791
     Title compds. A-D-B (I) [D = NHCONH; A = (un)substituted t-butylpyridyl,
AB
     etc.; B = (un) substituted bridged cyclic structure, etc.] and analogs were
     prepared For instance, 4-tert-butyl-2-aminopyridine was coupled to
     4-(4-pyridylmethyl)aniline (CH2Cl2, CDI, 0°) to give
     N-(4-tert-butylpyridyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea as a white
     solid. Example compds. had IC50 between 10nM and 10µM for raf kinase.
     I are useful for the treatment of cancerous cell growth mediated by raf
     inhibition raf kinase quinoline isoquinoline pyridine ureas prepn
ST
ΙT
     Antitumor agents
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Kwon 09/838286 Page 22

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Neoplasm
        (preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
        kinase)
TT
     139691-76-2, Raf kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
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TΤ
     432050-17-4P, N-(4-tert-Butylpyridyl)-N'-(2,3-dichlorophenyl)urea
     432050-18-5P, N-(4-tert-Butylpyridyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea
     432050-19-6P, N, N'-[2-Methoxyquinolin-3-yl]urea
                                                        432050-20-9P,
     N-(4-tert-Butylpyridyl)-N'-[4-(4-chlorophenoxy)phenyl]urea 432050-21-0P,
     N-[5-(Trifluoromethyl)pyridin-2-yl]-N'-[3-(4-pyridylthio)phenyl]urea
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     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
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     100-11-8, 4-Nitrobenzyl bromide
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     101-77-9, 4,4'-Methylenedianiline 101-79-1, 4-(4-Chlorophenoxy)aniline
     106-44-5, 4-Methylphenol, reactions 109-00-2, 3-Hydroxypyridine
     123-30-8, 4-Aminophenol 123-39-7, N-Methylformamide
     4-Phenoxyaniline 150-76-5, 4-Methoxyphenol 288-32-4, Imidazole,
     reactions 350-46-9, 1-Fluoro-4-nitrobenzene 400-74-8,
     2-Fluoro-5-nitrobenzotrifluoride 585-79-5, 1-Bromo-3-nitrobenzene
     620-95-1, 3-Benzylpyridine 624-28-2, 2,5-Dibromopyridine 626-61-4-Chloropyridine 673-09-6, 4-(4-Pyridylthio)aniline 872-31-1, 3-Bromothiophene 1083-48-3, 4-(4-Nitrobenzyl)pyridine 1121-78-4,
                                                                     626-61-9.
     5-Hydroxy-2-methylpyridine 1849-36-1, 4-Nitrothiophenol
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     3,4-Dimethoxyphenol 2103-88-0, 2-Mercapto-4-phenylthiazole
     4548-45-2, 2-Chloro-5-nitropyridine 4556-23-4, 4-Mercaptopyridine
     4595-59-9, 5-Bromopyrimidine 7379-35-3, 4-Chloropyridine hydrochloride
     21101-60-0, 4-(4-Nitrophenylthio)phenol 22948-02-3, 3-Aminothiophenol
     25267-27-0, Iodobutane 25475-67-6, 3-Aminoisoquinoline 27163-00-4,
     4-[(4-Methoxyphenyl)methylamino]aniline 29264-35-5, 4-(3-Carboxy-4-
     hydroxyphenoxy)-1-nitrobenzene 33252-26-5, 2-Amino-4-tert-butylpyridine
     36265-31-3, 4-(4-Methylthiophenoxy)-1-nitrobenzene 41195-90-8,
     2,3-Dichlorophenyl isocyanate 41295-20-9, 4-(4-Methylphenoxy)aniline
     42732-49-0, 3-Hydroxy-5-methylpyridine 73322-01-7, 4-(2-Pyridinylthio)-1-
     nitrobenzene
                    74784-70-6, 2-Amino-5-(trifluoromethyl)pyridine
                   150009-83-9, 3-Amino-2-methoxyquinoline
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     102877-78-1
     4-(4-Pyridylcarbonyl)aniline 284462-37-9, 4-((2-(Methylcarbamoyl)pyridin-
                        361551-95-3, 3-(4-Pyridylmethyl)aniline 362688-26-4,
     4-yl)oxy)aniline
     1-(4-Methylpiperazinyl)-3-aminoisoquinoline
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        (preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf
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     6337-24-2P, 1-Methoxy-4-(4-nitrophenoxy)benzene
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     5-Bromo-2-methoxypyridine 18994-90-6P, 4-(1-Imidazolylmethyl)-1-nitrobenzene 27692-74-6P, 4-(4-Pyridinylmethyl)aniline 28232-34-0P,
     5-Nitro-2-(4-methylphenoxy)pyridine 28232-52-2P, 3-(3-Pyridinyloxy)-1-
                   31465-36-8P, 4-(4-Methoxyphenoxy)aniline 32361-76-5P,
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     3-(4-Nitrobenzyl)pyridine 36089-89-1P, 4-(4-Methylsulfonylphenoxy)-1-
     nitrobenzene
                    51834-97-0P, 5-Hydroxy-2-methoxypyridine
                                                                  62248-47-9P,
     4-(4-Butoxyphenyl)thio-1-nitrobenzene 62248-51-5P, 4-(4-Butoxyphenyl)thioaniline 64064-63-7P, 4-(6-Methyl-3-pyridinyloxy)-1-
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     3-(4-Pyridinylthio)aniline 116289-71-5P, 3-(3-Pyridinyloxy)aniline
     178809-75-1P, 4-[1-Hydroxy-1-(4-pyridyl)methyl]-1-nitrobenzene
     220000-87-3P, 2-(N-Methylcarbamoyl)-4-chloropyridine
                                                              228401-26-1P,
     3-(Trifluoromethyl)-4-(4-pyridinylthio)nitrobenzene
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     3-(Trifluoromethyl)-4-(4-pyridinylthio)aniline 228401-28-3P,
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4-[[4-Phenylthiazol-2-yl]sulfanyl]-1-nitrobenzene 228401-29-4P,

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4-[[4-Phenylthiazol-2-yl]sulfanyl]aniline
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     4-(6-Methyl-3-pyridinyloxy)aniline 228401-32-9P, 4-(3,4-
    Dimethoxyphenoxy)-1-nitrobenzene 228401-33-0P, 4-(3,4-
    Dimethoxyphenoxy)aniline 228401-36-3P, 5-Amino-2-(4-
    methylphenoxy)pyridine Dihydrochloride 228401-37-4P,
     4-(3-Thienylthio)-1-nitrobenzene 228401-38-5P, 4-(5-
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     Pyrimidinyloxy) aniline
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     4-(3-Methoxycarbonyl-4-methoxyphenoxy)-1-nitrobenzene
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    4-(3-Carboxy-4-methoxyphenoxy)-1-nitrobenzene
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    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
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L75 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
     2002:615574 HCAPLUS
AN
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     137:169425
ED
     Entered STN: 16 Aug 2002
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     Preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase
     inhibitors
IN
     Dumas, Jacques; Riedl, Bernd; Khire, Uday;
     Wood, Jill E.; Sibley, Robert N.; Monahan, Mary-Katherine
     ; Renick, Joel; Gunn, David E.; Lowinger, Timothy B.;
     Scott, William J.; Smith, Roger A. Bayer Corporation, USA
PA
     PCT Int. Appl., 125 pp.
SO
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          C07D401-12; A61K031-4406; A61K031-47; A61P035-00; C07D401-12;
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     MARPAT 137:169425
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CMe3

NHMe

NHMe

GΙ

Title compds., e.g., RNHCONHZOR1 [I; R = C6H4(CMe3)-3, 2-methoxy-5-trifluoromethylphenyl, 4-chloro-3-trifluoromethylphenyl, 2-methoxy-3-quinolyl, etc.; R1 = (un)substituted acylphenyl, -acylpyridinyl, etc.; Z = (un) substituted 1,3- or -1,4-phenylene] were • prepared Thus, 4-(H2N)C6H4OC6H4(CONHMe)-4 (preparation given) was condensed with 3-(Me3C)C6H4NH2 and CO(OCCl3)2 to give title compound II. Data for biol. activity of title compds. were given. ST acylphenoxyphenylurea prepn raf kinase inhibitor; antitumor agent acylphenoxyphenylurea prepn TT Antitumor agents Human (preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase inhibitors) тт Neoplasm (treatment; preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase inhibitors) IT 139691-76-2, Raf kinase RL: BSU (Biological study, unclassified); BIOL (Biological study) (mediated disorders; treatment; preparation of N-aryl-N'-

II

[(acylphenoxy)phenyl]ureas as raf kinase inhibitors)

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                   447457-09-2P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase
        inhibitors)
IT
    75-31-0, Isopropylamine, reactions
                                          98-58-8, 4-Bromobenzenesulfonyl
    chloride 98-98-6, Picolinic acid
                                          99-93-4, p-Hydroxyacetophenone
    99-98-9, 4-(Dimethylamino)aniline 100-51-6, Benzyl alcohol, reactions
    101-79-1, 4-(4-Chlorophenoxy) aniline 106-50-3, p-Phenylenediamine,
    reactions 108-95-2, Phenol, reactions
                                              109-85-3, 2-Methoxyethylamine
    123-30-8, 4-Aminophenol
                             123-54-6, Acetylacetone, reactions
                                                                   320-51-4,
    4-Chloro-3-(trifluoromethyl)aniline 327-78-6, 4-Chloro-3-(trifluoromethyl)phenyl isocyanate 349-65-5, 2-Methoxy-5-
     (trifluoromethyl)aniline 350-46-9, 1-Fluoro-4-nitrobenzene
                                                                    371-40-4.
     4-Fluoroaniline 393-36-2, 4-Bromo-3-(trifluoromethyl)aniline
                                                                      462-08-8,
    3-Aminopyridine 490-79-9, 2,5-Dihydroxybenzoic acid 591-27-5,
     3-Aminophenol 610-35-5, 4-Hydroxyphthalic acid 619-08-9,
     2-Chloro-4-nitrophenol
                             626-61-9, 4-Chloropyridine 883-99-8, Methyl
    3-hydroxy-2-naphthoate
                             1121-78-4, 5-Hydroxy-2-methylpyridine
    1193-02-8, 4-Aminothiophenol
                                   1664-40-0, N-Phenylethylenediamine
    1877-71-0, Mono-Methyl isophthalate 2038-03-1, 4-(2-
    Aminoethyl) morpholine 2524-67-6, 4-Morpholinoaniline
                                                             2835-95-2,
     5-Amino-2-methylphenol
                             2835-99-6, 4-Amino-3-methylphenol 2905-24-0,
    3-Bromobenzenesulfonyl chloride 3535-88-4, 5-tert-Butyl-2-methoxyaniline
    3964-52-1, 4-Amino-2-chlorophenol 4548-45-2, 2-Chloro-5-nitropyridine 4795-29-3, Tetrahydrofurfurylamine 5369-19-7, 3-tert-Butylaniline
     6310-19-6, 2-Nitro-4-tert-butylaniline 6628-77-9, 5-Amino-2-
    methoxypyridine 6927-86-2, 4-(4-Acetylphenoxy)aniline hydrochloride
     7781-98-8, Ethyl 3-hydroxybenzoate
                                          13154-24-0, Triisopropylsilyl
               22948-02-3, 3-Aminothiophenol 25900-61-2,
    chloride
    3-(Methylcarbamoyl)aniline 26116-12-1, 2-(Aminomethyl)-1-
    ethylpyrrolidine
                       27578-60-5, 1-(2-Aminoethyl)piperidine 30766-22-4,
    Methyl 5-hydroxynicotinate 30806-83-8, Ethyl 4-isocyanatobenzoate
    33252-26-5, 2-Amino-4-tert-butylpyridine 34803-66-2,
    N-(2-Pyridyl)piperazine 36265-31-3, 4-(4-(Methylthio)phenoxy)-1-
    nitrobenzene 106164-64-1 150009-83-9, 3-Amino-2-methoxyquinoline
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        (preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase
        inhibitors)
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IΤ
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     4-Bromo-3-(trifluoromethyl)phenyl isocyanate 50727-06-5P,
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     5-Hydroxyisoindoline-1,3-dione
     chloride hydrochloride 54579-63-4P, 4-(3-Carboxyphenoxy)aniline
     64064-63-7P, 4-((2-Methylpyridin-5-yl)oxy)-1-nitrobenzene
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     2-Amino-3-methoxynaphthalene
     4-Bromo-3-(trifluoromethyl)aniline hydrochloride
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     3-Chloro-4-(2,2,2-trifluoroacetylamino)phenol
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     228401-44-3P, 4-(3-Carboxy-4-methoxyphenoxy)-1-nitrobenzene
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        (preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase
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L75 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:409267 HCAPLUS

DN 137:6098

ED Entered STN: 31 May 2002

TI Heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors

IN Dumas, Jacques; Riedl, Bernd; Khire, Uday;

Sibley, Robert N.; Hatoum-Mokdad, Holia; Monahan,
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Mary-katherine; Gunn, David E.; Lowinger, Timotthy B.;
     Scott, William J.; Smith, Roger A.; Wood, Jill
PA
     Bayer Corporation, USA
     U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. Ser. No. 778,039.
SO
     CODEN: USXXCO
DT
     Patent
LA
     English
IC
     ICM A61K031-506
     ICS A61K031-501; A61K031-497; A61K031-4725; A61K031-4709
INCL 514310000
     27-17 (Heterocyclic Compounds (One Hetero Atom))
     Section cross-reference(s): 1
FAN.CNT 5
     PATENT NO.
                         KIND DATE
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                 CLASS PATENT FAMILY CLASSIFICATION CODES
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                 ICS
                        A61K031-501; A61K031-497; A61K031-4725; A61K031-4709
                 INCL
                        514310000
                        514/310.000; 514/313.000; 514/336.000; 514/337.000;
US 2002065296
                 NCL
                        514/252.030; 514/252.040; 514/255.050; 514/256.000
                 ECLA
                        A61K031/17; A61K031/18; A61K031/24; A61K031/341;
                        A61K031/40+A; A61K031/4035; A61K031/44; A61K031/44+A;
                        A61K031/4439; A61K031/4453; A61K031/47; A61K031/4709;
                        A61K031/4725; A61K031/495+A; A61K031/496; A61K031/5375;
                        A61K031/5377; C07D213/75D3; C07D215/38C; C07D217/22;
                        C07D401/12+215+213
US 2003139605
                 NCL
                        546/291.000
                 ECLA
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                        C07D213/75D3; C07D213/81E; C07D295/12A1;
                        C07D295/12B1D4; C07D295/18B2D; A61K031/18; A61K031/24;
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                        A61K031/5375; A61K031/5377; C07C275/28; C07C275/30;
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                         C07D401/12+215+213; C07D401/12+217+213
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                         4C086/ZB35; 4C086/ZC21; 4C086/ZC35
     MARPAT 137:6098
AB
     This invention relates to the use of a group of heteroaryl ureas (I; for
     example, N-(2-methoxy-3-quinoly1)-N'-[4-[3-(N-
     methylcarbamoyl)phenoxy]phenyl]urea) containing N in treating p38 mediated
     diseases, and pharmaceutical compns. for use in such therapy. I is
     A-NHC(O)NH-B or a pharmaceutically acceptable salt thereof, wherein A is a
     substituted or unsubstituted pyridyl, quinolinyl or isoquinolinyl group, B
     is a substituted or unsubstituted, up to tricyclic aryl or heteroaryl
     moiety of up to 50 C atoms with a cyclic structure bound directly to N,
     containing at least 5 cyclic members with 0-4 members of groups consisting of
     N, O and S. Information about the substituents for A and B are given in
     the claims. Although the methods of preparation are not claimed, 37 example
     prepns. are included as well as examples of preparation of intermediates. No
     pharmacol. data is included.
     nitrogen heteroaryl urea prepn p38 kinase inhibitor; pyridyl urea prepn
ST
     p38 kinase inhibitor; quinolyl urea prepn p38 kinase inhibitor;
     isoquinolyl urea prepn p38 kinase inhibitor
TТ
     Infection
        (Chagas' disease; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Inflammation
        (Crohn's disease; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
ΙT
     Intestine, disease
        (Crohn's; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors for treatment of)
TТ
     Disease, animal
        (Jarisch-Herxheimer reaction; preparation of heteroaryl ureas containing
        nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)
     Malaria
        (Plasmodium falciparum malaria and cerebral malaria; preparation of
        heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
        for treating)
IT
     Antimalarials
        (Plasmodium falciparum malaria and cerebral malaria; preparation of
        heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors
        for use as)
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Shiga-like toxin, effects of toxins from Escherichia coli infection;
        preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors for treatment of)
TT
     Respiratory distress syndrome
        (adult; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
     Hepatitis
TΤ
        (alc.; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
IT
     Transplant rejection
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(allotransplant; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Lung

(alveolus, injury; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Antiarteriosclerotics

(antiatherosclerotics; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as)

IT Aneurysm

(aortic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Meningitis

(bacterial; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Necrosis

(bowel; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Bronchi, disease

Inflammation

(bronchitis, obliterative; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Injury

(cerebral; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Pneumoconiosis

(coal worker's; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Eye, disease

(cornea, ulcer; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Ulcer

(corneal; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Radiation

(damage, injury/toxicity following administration of monoclonal antibodies; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Cartilage, disease

(degeneration; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Multiple sclerosis

(demyelation and oligiodendrocyte loss in; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Liver, disease

(during acute inflammation; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Toxins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (enterotoxin A, effects of toxins from Staphylococcus infection; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Skin, disease

(epidermolysis bullosa, dystrophobic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Liver, disease

(failure; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Lung, disease

(fibrosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

IT Nervous system agents

(for demyelating disease; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as)

IT Wound healing

(impaired wound healing in infection; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)

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цT
     Helicobacter pylori
        (infection during peptic ulcer disease; preparation of heteroaryl ureas
        containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)
IT
     Borrelia burgdorferi
     Cytomegalovirus
     Human immunodeficiency virus
     Influenza virus
     Theiler's murine encephalomyelitis virus
     Treponema pallidum
        (infections from; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treatment of)
TT
     Brain, disease
     Reperfusion
        (injury; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38
        kinase inhibitors for treatment of)
IT
        (lymphocytic, inhibitors; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for use as)
IT
     Neoplasm
        (metastasis, inhibitors; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for use as)
IT
     Heterocyclic compounds
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (nitrogen, heteroaryl ureas; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors)
TT
     Bone, disease
        (osteopenia, mediated by MMP activity; preparation of heteroaryl ureas
        containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of)
TΥ
     Inflammation
     Pancreas, disease
        (pancreatitis; preparation of heteroaryl ureas containing nitrogen hetero-atoms
        as p38 kinase inhibitors for treatment of)
IT
     Ulcer
        (peptic, Helicobacter pylori infection during; preparation of heteroaryl
        ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for
        treatment of)
IT
     Osteoporosis
        (postmenopausal; preparation of heteroaryl ureas containing nitrogen
        hetero-atoms as p38 kinase inhibitors for treating)
IT
        (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors)
IT
     Allergy
     Alzheimer's disease
     Arthritis
     Asthma
     Diabetes mellitus
     Rheumatoid arthritis
     Tuberculosis
        (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors for treating)
TT
     Encephalitis
     Myelodysplastic syndromes
     Periodontium, disease
     Psoriasis
     Rheumatic fever
     Silicosis
        (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors for treatment of)
IT
     Allergy inhibitors
     Anti-Alzheimer's agents
     Anti-infective agents
     Anti-inflammatory agents
     Antiarthritics
```

Antiasthmatics Antibacterial agents Anticoaqulants Antidiabetic agents Antirheumatic agents Antitumor agents Cardiovascular agents Contraceptives Tuberculostatics (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) IT Biliary tract, disease (primary biliary cirrhosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (proteinuria; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) TΤ Fibrosis Sarcoidosis (pulmonary; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Injury (reperfusion; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Bone (resorption; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Lung, disease (sarcoidosis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Shock (circulatory collapse) (septic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) ΙT Inflammation (systemic inflammatory response syndrome; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Lupus erythematosus (systemic; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Disease, animal (temporomandibular joint; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Joint, anatomical (temporomandibular, disease; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Osteoporosis (therapeutic agents, postmenopausal; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for use as) Shock (circulatory collapse) IT (toxic shock syndrome; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT Digestive tract, disease (ulcer, peptic, Helicobacter pylori infection during; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) Inflammation IT Intestine, disease (ulcerative colitis; preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors for treatment of) IT 165245-96-5, p38 Kinase RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors, preparation of heteroaryl ureas containing nitrogen hetero-atoms IT 673-09-6P, 4-(4-Pyridylthio)aniline 6337-24-2P, 1-Methoxy-4-(4-

nitrophenoxy) benzene 13472-85-0P, 5-Bromo-2-methoxypyridine

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18994-90-6P, 4-(1-Imidazolylmethyl)-1-nitrobenzene 27237-21-4P,
4-(3-Carboxyphenoxy)-1-nitrobenzene 27692-74-6P, 4-(4-
Pyridinylmethyl)aniline 28232-34-0P, 5-Nitro-2-(4-methylphenoxy)pyridine
28232-52-2P, 3-(3-Pyridinyloxy)-1-nitrobenzene 29264-35-5P,
4-(3-Carboxy-4-hydroxyphenoxy)-1-nitrobenzene 31465-36-8P,
4-(4-Methoxyphenoxy)aniline
                            32361-76-5P, 3-(4-Nitrobenzyl)pyridine
36089-89-1P, 4-(4-Methylsulfonylphenoxy)-1-nitrobenzene
                                                         50727-06-5P,
                               51727-15-2P, 4-Chloropyridine-2-carbonyl
5-Hydroxyisoindoline-1,3-dione
chloride hydrochloride 51834-97-0P, 5-Hydroxy-2-methoxypyridine
56643-85-7P, 4-(1-Imidazolylmethyl)aniline
                                            62248-47-9P,
4-[(4-Butoxyphenyl)thio]-1-nitrobenzene 62248-51-5P,
4-(4-Butoxyphenyl)thioaniline 64064-63-7P, 4-(6-Methyl-3-pyridinyloxy)-1-
nitrobenzene 70991-08-1P, 4-(2-Pyridinylthio)aniline 71708-64-0P,
4-[3-(N-Methylcarbamoyl)phenoxy]-1-nitrobenzene 85666-15-5P,
4-[(3-Pyridinyl)methyl]aniline 92575-23-0P, 3-(4-Pyridinylthio)aniline
99586-65-9P, 4-Chloro-2-pyridinecarboxamide 102877-78-1P
                                                            116289-71-5P,
                          135680-03-4P, 4-(4-tert-
3-(3-Pyridinyloxy)aniline
Butoxycarbonylaminobenzyl)aniline
                                   176977-85-8P, Methyl
4-chloropyridine-2-carboxylate hydrochloride 178809-75-1P,
4-[Hydroxy(4-pyridyl)methyl]-1-nitrobenzene
                                             220000-87-3P
                                                            228401-26-1P.
3-(Trifluoromethyl)-4-(4-pyridinylthio)nitrobenzene
                                                     228401-27-2P.
3-(Trifluoromethyl)-4-(4-pyridinylthio)aniline 228401-28-3P,
4-[(4-Phenyl-2-thiazolyl)thio]-1-nitrobenzene
                                               228401-29-4P,
4-[(4-Phenyl-2-thiazolyl)thio]aniline 228401-31-8P, 4-(6-Methyl-3-
                     228401-32-9P, 4-(3,4-Dimethoxyphenoxy)-1-
pyridinyloxy) aniline
nitrobenzene 228401-33-0P, 4-(3,4-Dimethoxyphenoxy)aniline
228401-34-1P, 3-(6-Methyl-3-pyridinyloxy)-1-nitrobenzene
3-(6-Methyl-3-pyridinyloxy)aniline 228401-36-3P, 5-Amino-2-(4-
methylphenoxy)pyridine Dihydrochloride
                                        228401-37-4P,
4-(3-Thienylthio)-1-nitrobenzene
                                 228401-38-5P, 4-(5-
Pyrimidinyloxy) aniline
                        228401-39-6P, 4-[(2-Methoxy-5-pyridyl)oxy]-1-
              228401-40-9P, 4-(2-Methyl-4-pyridinyloxy)aniline
nitrobenzene
228401-41-0P, Methyl (4-nitrophenyl) (4-pyridyl) amine
4-(3-Methoxycarbonyl-4-methoxyphenoxy)-1-nitrobenzene
                                                       228401-44-3P,
4-(3-Carboxy-4-methoxyphenoxy)-1-nitrobenzene
                                               284462-37-9P,
4-[2-(N-Methylcarbamoyl)-4-pyridyloxy]aniline
                                               284462-38-0P,
5-(4-Nitrophenoxy) isoindoline-1,3-dione
                                        284462-39-1P,
5-(4-Aminophenoxy)isoindoline-1,3-dione
                                         284462-46-0P,
4-[3-(N-Methylcarbamoyl)-4-methoxyphenoxy]-1-nitrobenzene
                                                           284462-47-1P,
4-[3-(N-Methylcarbamoyl)-4-methoxyphenoxy]aniline
                                                   284462-55-1P.
4-(3-Ethoxycarbonylphenoxy)-1-nitrobenzene
                                            284462-56-2P,
4-(3-N-Methylcarbamoylphenoxy) aniline
                                       284462-78-8P, 3-[2-(N-
                                       284462-79-9P, 3-(2-Carbamoyl-4-
Methylcarbamoyl)-4-pyridyloxy]aniline
pyridyloxy) aniline
                   284462-80-2P, 4-(2-Carbamoyl-4-pyridyloxy)aniline
284462-84-6P, 4-(4-Methylsulfonylphenoxy)aniline
                                                  432050-13-0P,
4-(3-Thienylthio)aniline 432050-14-1P, 4-[(2-Methoxy-5-
pyridyl)oxy]aniline 432050-15-2P, Methyl(4-aminophenyl)(4-pyridyl)amine
432050-16-3P, 4-[Hydroxy(4-pyridyl)methyl]aniline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of heteroaryl ureas containing nitrogen hetero-atoms
   as p38 kinase inhibitors)
284461-54-7P, N-[2-Methoxy-5-(trifluoromethyl)phenyl]-N'-[4-(1,3-
dioxoisoindolin-5-yloxy)phenyl]urea 284670-98-0P, N,N'-Bis[4-[2-(N-
methylcarbamoyl)-4-pyridyloxy]phenyl]urea 432050-17-4P
432050-18-5P
              432050-19-6P, N,N'-Bis(2-methoxy-3-quinolinyl)urea
              432050-21-0P, N-[5-Trifluoromethyl-2-pyridyl]-N'-[3-(4-
432050-20-9P
pyridylthio)phenyl]urea 432050-22-1P, N-(2-Methoxy-3-quinolinyl)-
N'-[4-(2-(N-Methylcarbamyl)-4-pyridyloxy)phenyl]urea 432050-23-2P
, N-(2-Methoxy-3-quinoly1)-N'-\overline{[4-[3-(N-methylcarbamoyl)phenoxy]phenyl]urea
432050-24-3P, N-(2-Methoxy-3-quinoly1)-N'-[4-(2-carbamoy1-4-
pyridyloxy)phenyl]urea 432050-25-4P, N-(2-Methoxy-3-quinolyl)-N'-
[3-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea 432050-26-5P,
N-(2-Methoxy-3-quinolyl)-N'-[3-(2-carbamoyl-4-pyridyloxy)phenyl]urea
432050-27-6P, N-(2-Methoxy-3-quinolyl)-N'-[4-[3-(N-
isopropylcarbamoyl)phenoxy]phenyl]urea 432050-28-7P,
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IT

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N-(2-Methoxy-3-quinolyl)-N'-[4-[4-methoxy-3-(N-
     methylcarbamoyl)phenoxy]phenyl]urea 432050-29-8P,
     N-(3-Isoquinoly1)-N'-[4-[2-(N-methylcarbamoy1)-4-pyridyloxy]pheny1]urea
     432050-30-1P, N-(4-tert-Butyl-2-pyridinyl)-N'-(4-methylphenyl)urea
     432050-31-2P, N-(4-tert-Butyl-2-pyridinyl)-N'-(4-fluorophenyl)urea
     432050-32-3P, N-(4-tert-Butyl-2-pyridinyl)-N'-(1-naphthyl)urea
     432050-33-4P, N-(4-tert-Butyl-2-pyridinyl)-N'-[4-(4-
     methoxyphenoxy) phenyl] urea
                                 432050-34-5P, N-(5-Trifluoromethyl-2-
     pyridinyl)-N'-[4-(4-pyridylmethyl)phenyl]urea 432050-35-6P,
     N-(3-Isoquinoly1)-N'-(4-methylphenyl)urea 432050-36-7P,
     N-(3-Isoquinoly1)-N'-(4-fluoropheny1)urea 432050-37-8P,
     N-(3-Isoquinoly1)-N'-(2,3-dichlorophenyl)urea 432050-38-9P,
     N-(3-Isoquinolyl)-N'-(1-naphthyl)urea 432050-39-0P,
     N-(3-Isoquinolyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea
     432050-40-3P, N-(3-Quinolyl)-N'-[4-(4-pyridinylmethyl)phenyl]urea
     432050-41-4P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-(4-
     methylphenoxy)phenyl)urea
                                  432050-42-5P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-
     (4-pyridyloxy)phenyl)urea
                                 432050-43-6P, N-(4-tert-Butyl-2-pyridyl)-N'-(4-
     (4-pyridinylthio)phenyl)urea 432050-44-7P, N-(4-tert-Butyl-2-pyridyl)-N'-
     (3-(4-pyridinylthio)phenyl)urea
                                       432050-45-8P
                                                       432050-46-9P
     432050-47-0P
                    432050-48-1P
                                    432050-49-2P
                                                   432050-50-5P
                                                                  432050-51-6P,
     N-(1-(4-Methyl-1-piperazinyl)) isoquinol-3-yl)-N'-(4-((4-Methyl-1-piperazinyl)))
     pyridyl)methyl)phenyl)urea 432050-52-7P, N-(Isoquinol-3-yl)-N'-(4-(3-
     (methylcarbamoyl)phenoxy)phenyl)urea 432050-53-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase
        inhibitors)
TT
     75-31-0, Isopropylamine, reactions
                                          86-84-0, 1-Naphthyl isocyanate
     98-98-6, Picolinic acid
                              100-11-8, 4-Nitrobenzyl bromide
     N-Methyl-4-nitroaniline
                              101-77-9, 4,4'-Methylenedianiline
                                                                     101-79-1,
     4-(4-Chlorophenoxy)aniline 106-44-5, 4-Methylphenol, reactions
                                   123-30-8, 4-Aminophenol
                                                              139-59-3,
     109-00-2, 3-Hydroxypyridine
     4-Phenoxyaniline 150-76-5, 4-Methoxyphenol 288-32-4, Imidazole, reactions 350-46-9, 1-Fluoro-4-nitrobenzene 400-74-8,
     2-Fluoro-5-nitrobenzotrifluoride 580-17-6, 3-Aminoquinoline
                                                                        585-79-5.
     1-Bromo-3-nitrobenzene 591-27-5, 3-Aminophenol
                                                         610-35-5,
                                                            622-58-2, 4-Tolyl
     4-Hydroxyphthalic acid 620-95-1, 3-Benzylpyridine
     isocyanate
                 624-28-2, 2,5-Dibromopyridine 626-61-9, 4-Chloropyridine
     626-64-2, 4-Hydroxypyridine 872-31-1, 3-Bromothiophene 1083-44-(4-Nitrobenzyl)pyridine 1121-78-4, 5-Hydroxy-2-methylpyridine
     1193-02-8, 4-Aminothiophenol 1195-45-5, 4-Fluorophenyl isocyanate
     1849-36-1, 4-Nitrothiophenol 2033-89-8, 3,4-Dimethoxyphenol
     2-Mercapto-4-phenylthiazole 3678-63-5, 4-Chloro-2-methylpyridine
     4548-45-2, 2-Chloro-5-nitropyridine 4556-23-4, 4-Mercaptopyridine 4595-59-9, 5-Bromopyrimidine 7379-35-3, 4-Chloropyridine hydrochloride
     7781-98-8, Ethyl 3-hydroxybenzoate 16588-75-3, 2-Methoxy-5-
     (trifluoromethyl) phenyl isocyanate
                                          21101-60-0, 4-(4-
     Nitrophenylthio) phenol 22948-02-3, 3-Aminothiophenol
                                                                24424-99-5,
     Di-tert-butyl dicarbonate 25267-27-0, Iodobutane
                                                           25475-67-6,
     3-Aminoisoquinoline
                          27163-00-4, 4-[(4-Methoxyphenyl)methylamino]aniline
     33252-26-5, 2-Amino-4-tert-butylpyridine
                                                  36265-31-3,
     4-(4-Methylthiophenoxy)-1-nitrobenzene 41195-90-8, 2,3-Dichlorophenyl
                  41295-20-9, 4-(4-Methylphenoxy)aniline
                                                             53750-66-6,
     4-Chloropyridine-2-carbonyl chloride
                                             73322-01-7, 4-(2-Pyridinylthio)-1-
     nitrobenzene 74784-70-6, 2-Amino-5-(trifluoromethyl)pyridine
     150009-83-9, 3-Amino-2-methoxyquinoline
                                                170893-64-8,
                                     362688-26-4, 1-(4-Methylpiperazinyl)-3-
     4-(4-Pyridylcarbonyl)aniline
     aminoisoquinoline
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; preparation of heteroaryl ureas containing nitrogen hetero-atoms as
        p38 kinase inhibitors)
IT
     432050-17-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
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(Uses)
```

(preparation of heteroaryl ureas containing nitrogen hetero-atoms as p38 kinase inhibitors)

RN432050-17-4 HCAPLUS

Urea, N-(2,3-dichlorophenyl)-N'-[4-(1,1-dimethylethyl)-2-pyridinyl]- (9CI) CN (CA INDEX NAME)

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=> d all hitstr 176 tot
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L76 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

2004:701815 HCAPLUS

141:185104 DN

ED

Entered STN: 27 Aug 2004 Compositions, combinations, and methods for treating cardiovascular ΤI conditions and other associated conditions

IN Rudolph, Amy E.; Rocha, Ricardo; Carretero, Oscar

PAUSA

so U.S. Pat. Appl. Publ., 107 pp.

CODEN: USXXCO

 \mathbf{DT} Patent

English LΑ

ICM A61K031-415

ICS A61K031-401

INCL 514406000; 514423000

1-8 (Pharmacology)

FAN.CNT 1 PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
ΡI	US 2004167197 WO 2004075852			A1		20040826		US 2004-788220					20040226					
				A2		20040910		WO 2004-US5609				20040226						
	W	AE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	AT,	AU,	AZ,	AZ,	BA,	BB,	BG,	
		BG,	BR,	BR,	BW,	BY,	BY,	BZ,	BZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,	
		CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,	
		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	ΗU,	HU,	ID,	IL,	IN,	
		IS,	JP,	JP,	KE,	KE,	KG,	KG,	ΚP,	ΚP,	ΚP,	KR,	KR,	ΚZ,	ΚZ,	ΚZ,	LC,	
		LK,	· LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,	
		MZ,	ΜZ,	NA,	NI													
	RV	: BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	ВÉ,	
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG									
	WO 2004075857				A2 20040910				WO 2004-US5799						20040226			
	W	AE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	ΑT,	ΑU,	ΑZ,	AZ,	BA,	BB,	BG,	
		•	,	•	•	,	BY,			•								
		CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,	
		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	ΗU,	ΗU,	ID,	IL,	IN,	
		IS,	JP,	JΡ,	KΕ,	KE,	KG,	KG,	ΚP,	KΡ,	KΡ,	KR,	KR,	KZ,	KZ,	KZ,	LC,	
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MΑ,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,	
		•	MZ,	•														
	RI	√: BW,					-											
			•	•	•	•	DK,	•	•					•				
		•	•	•	•	•	SI,	•	-									
				,	,	•	SN,	•	•	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG									

PRAI US 2003-450529P Р 20030226 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES _____ A61K031-415 US 2004167197 ICM ICS A61K031-401 INCL 514406000; 514423000 514/406.000; 514/423.000 US 2004167197 NCL This invention is directed generally to a method for treating a pathol. AB condition (particularly a cardiovascular condition (e.g., hypertension or heart failure) or a condition associated with a cardiovascular condition) using a p38-kinase inhibitor (e.g., a p38-kinase-inhibiting substituted pyrazole), and specifically a combination comprising a p38-kinase inhibitor with an angiotensin-converting-enzyme inhibitor (or "ACE inhibitor") for treating a cardiovascular condition. This invention also is directed generally to combinations comprising a p38-kinase inhibitor, and specifically to combinations comprising a p38-kinase inhibitor with an angiotensin-converting-enzyme inhibitor. This invention is further directed generally to pharmaceutical compns. comprising a p38-kinase inhibitor, and more specifically to compns. comprising the above-described combinations. cardiovascular hypertension heart failure p38 kinase pyrazole ACE STinhibitor TТ Heart, disease (arrhythmia; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) IT Ischemia (cardiac; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) TТ Heart, disease (cardiomyopathy; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) тт Brain, disease (cerebrovascular; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) TT Anti-ischemic agents Antiarrhythmics Antihypertensives Blood vessel, disease Cardiovascular agents Cardiovascular system, disease Combination chemotherapy Drug interactions Edema Hypertension Kidney, disease (compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) ΙT (coronary angioplasty; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) IT (coronary arterial; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) ΙT (coronary, angioplasty; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) IT Artery, disease (coronary, thrombosis; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) IT (coronary; compns., combinations, and methods for treating cardiovascular conditions and other associated conditions) TT Blood vessel, disease (endothelium; compns., combinations, and methods for treating

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cardiovascular conditions and other associated conditions)
тт
    Heart, disease
        (failure; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
TT
    Heart, disease
        (fibrosis; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
    Heart, disease
        (infarction; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
    Heart, disease
TT
        (ischemia; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
    Heart, disease
     Inflammation
        (myocarditis; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
    Nerve, disease
        (neuropathy; compns., combinations, and methods for treating
       cardiovascular conditions and other associated conditions)
IT
    Eye, disease
        (retinopathy; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
     Endothelium
        (vascular, disease; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
    Blood vessel, disease
     Inflammation
        (vasculitis; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
    Heart, disease
        (ventricle, hypertrophy; compns., combinations, and methods for
        treating cardiovascular conditions and other associated conditions)
TT
    Hypertrophy
        (ventricular; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
     165245-96-5, p38-Kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (compns., combinations, and methods for treating cardiovascular
        conditions and other associated conditions)
     39698-78-7, Saralasin acetate
                                    62571-86-2, Captopril
                                                            72873-74-6
IT
     74258-86-9, Alacepril 75847-73-3, Enalapril
                                                   76420-72-9, Enalaprilat
     76547-98-3, Lisinopril 82768-85-2, Quinaprilat 82834-16-0, Perindopril
     83435-66-9, Delapril 83647-97-6, Spirapril 85441-61-8, Quinapril
     85856-54-8, Moveltipril 86541-75-5, Benazepril 87333-19-5, Ramipril
     87679-37-6, Trandolapril
95399-71-6, Fosinoprilat
                              88768-40-5, Cilazapril
98048-97-6, Fosinopril
                                                        89371-37-9, Imidapril
                                                        103775-10-6, Moexipril
                               111902-57-9, Temocapril 152121-30-7
     111223-26-8, Cero-napril
                               165806-09-7
     152121-47-6
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     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (compns., combinations, and methods for treating cardiovascular
        conditions and other associated conditions)
IT
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        (inhibitors; compns., combinations, and methods for treating
        cardiovascular conditions and other associated conditions)
IT
     432050-23-2
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (compns., combinations, and methods for treating cardiovascular
        conditions and other associated conditions)
ŔN
     432050-23-2 HCAPLUS
CN
     Benzamide, 3-[4-[[[(2-methoxy-3-quinoliny1)amino]carbony1]amino]phenoxy]-N-
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=> b home FILE 'HOME' ENTERED AT 12:11:56 ON 06 JUN 2005